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there are new and fertile markets yet to be explored . . .
there are old, established markets whose possibilities and potential
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AS THE EDITOR SEES IT

WITH each passing day, fats and oils become more of a Washington football. As export allocations go, so go the markets. Up today and down tomorrow,—up, down, up, down, up, down, ad infinitum,—not an eighth or a quarter cent as in normal times of yesteryear, but up five cents at a clip, down four, and so on. At first, the soapers yell bloody murder that the allocations are too large, and prices skyrocket. Remember the fall of 1947? And then, allocations are cut, and down go the prices. And the renderers set up a big squawk that there is a large surplus of inedible tallow and no place to sell it except for export. And the Fats and Oils Division of USDA sits in the middle taking it first from one side and then from the other, with an occasional kick thrown in by the shortening, margarin and salad oil people for good measure.

If the fallacy and weakness of continued fat and oil controls have not become glaringly apparent by this time, we fear that it is because of a flat refusal to perceive such weakness. To administer controls with rigid impartiality and to the satisfaction of all parties would take the wisdom of a dozen Solomons. As we have said before, where millions of dollars in market speculative possibilities are involved, government controls of any sort are bound to impart a hair-trigger sensitivity to prices. In our opinion, only after the removal of controls and a return to a free world market will anything resembling permanent stability be attained, and an end be reached in these jagged peak-and-valley price movements.

World fat and oil production is making rapid strides forward toward fulfilling all needs. Rejected allocations bear witness to this. The removal of artificial trade barriers would, in our opinion, speed up, rather than retard such progress. World markets must some day be permitted to seek their own level. Why is right now not that time? The fat experts who repeatedly have predicted various and sundry acute shortages have been proved wrong as often as right. We have been skeptical of their predictions for the past several years. And we do not believe that the world fat situation will ever return to normal as long as it is wet-nursed under an international patch-quilt plan. Give it a year of free markets and we will gamble that normal worldwide buying and selling will do more to iron out present kinks than all the government controls in christendom. For we never shall have stability while the law of supply and demand is thwarted at every turn by IEFC barriers.

That a controlled economy invariably brings evils worse than those which the controls are supposed to correct has been our studied observation these many years. We feel that this is likewise true in the case of world fat and oil markets and supplies. Had we cut loose from controls two years ago, who is to say that we would not be far better off today and minus the current purchasing agent's nightmare?

TO close out or reduce their stocks of non-soap detergents, some manufacturers are reported to have been slashing prices in an effort to move the stuff on to dealers' shelves. Just recently, the technical director for one of the world's largest department stores mentioned that non-soap detergents were being thrust upon him at low prices,—"and not in carloads, but in trainloads." He pointed out that these were mostly products which apparently had not been doing too well in the stores, that manufacturers' stocks had accumulated and they were anxious to unload. He stated that current sales of non-soap detergents have dropped off due chiefly to "an awakening of the public to the falsity of the claims made for many synthetics."

In our opinion, the advent of the synthetic organic detergent for household uses has been the single most important development in the

soap and detergent field of the past decade. That many fakes and frauds would pose as true synthetic detergents of merit and bask in the new-won popularity of the "non-soap" designation was to be expected. But, we might add that most all synthetic detergent retail advertising laid it on pretty thick, so thick in fact that public disappointment would have been difficult to avoid. The secondary reaction to this composite development in detergent marketing was a "falsity of claims" conclusion in numerous instances and an enhancement in the public mind of the older soap products.

Not only has baldly exaggerated advertising for non-soap detergents confused and misled the public. It has disgusted store buyers, merchandisers, and technical people as well. And even though synthetics may enjoy twenty-five per cent or more of the total soap-detergent market, with the prospect of a continued long-range rise in this percentage, their sale can be retarded and their future injured by "false claims" thinking in key spots.

SUCCESS invariably brings quick imitation. Witness the meteoric rise during the past year of a glass cleaner which in effect has become the talk of the household chemical specialty field. From little or nothing a few years back, the product has grown to a reputed four million dollars in sales per year. But not until it had attained outstanding market success, did its imitatiors recognize its great merit. Not until it made the cash registers ring, did they recognize the gold in the hills,—and clamber on the bandwagon.

In one way, we suppose that this is competition, that it is the inevitable price of success. But in another sense, it is slightly nauseating. One pioneer does the heavy work, plows the first furrow, and as soon as it looks like his crop is a success, a dozen others shout "me, too!" Under the guise of trade, industry, or business, there are those who will do most anything for a quick dollar. Maybe we are wrong, but our sympathies are invariably with the independent pioneer who had the guts to do it first,—and we unconsciously resent others who boldly make no bones of trying to chisel in.

Some years ago, we remember the case of Lifebuoy Soap which then was engaged in a very extensive advertising campaign and by dint of which it became the top toilet soap seller in the United States. A dozen or more imitations of Lifebuoy, sold as "health soap," came quickly on the market in an attempt to cash in on the extensive and expensive advertising. They used the same odor, same red color, and same shape. They sold at a lower price and for a time cut well into the market. But Lever was not long in clamping down on its imitators in the courts. The era of dozens of brands of "health soap" ended,—and quickly.

To a degree, we are reminded of the Lifebuoy case in the current market and legal battles over the widely advertised glass cleaner. We in no way feel that a market should be restricted to one brand alone, but where the imitation is bold and blatant, and obviously a grab for a quick dollar in a field pioneered and developed by the other fellow, our feelings cannot help but favor him who risked the money to do it first.

OFFERING a soapless detergent in a sensational advertisement at a sensational cut price, one of the country's leading department stores recently gave as the reason for this speecial sale that "the manufacturer boxed this magnificent soapless detergent in a hideous pink box . . . All the manufacturer's taste was in his mouth. His product was perfect . . . And bad as the color of the box was, the stuff sold like crazy." And so it went.

The stuff sold like crazy, but the manufacturer, or his advertising agency, their artistic natures deeply outraged by that just too, too awful pink box, decided in the present rather lousy market for such things as soaps and detergents to wipe out their artistic sin in one grand gesture and to put that horrible pink box forever out of their lives. The stuff was selling like crazy,—but, oh, that awful pink box!

At this point—while the music plays"Hearts and Flowers" softly,—we are reminded, not of the bard of Avon, nor yet of Shelley, but more of a bartender of our acquaintence in a saloon over on Third Avenue. In a circumstance like this, we know what his pithy comment would be,—"Calves may come and cows may go, but the old bull goes on forever."

Paint Brush Cleaners

By Milton A. Lesser

THOSE who should know say that the United States as a whole, is about 80 per cent underpainted. It is further estimated that about ten million householders, many of them unable to secure the services of a painter, are trying to paint their own homes. (1) With them must be included the numerous apartment house dwellers whose landlords no longer include periodic painting as part of the regular services. The majority of these amateur painters are capable of doing a good job, provided they use a good quality paint and apply it properly with a paint brush of the right type.

Of course, this means increased sales of paint brushes and with it an increased demand for paint brush cleaners. Professional painters consider paint brushes as valuable tools and accord them the care they deserve. The occasional painter has been prone to overlook the need for careful cleaning and storage of paint brushes. There are probably few articles purchased for the average household in which there has been greater waste than in the case of paint brushes. Generally put aside, usually with only superficial paint removal and without proper storage care, the brush becomes hard and stiff as the paint dries. Feeling that it could not be restored to any degree of usefulness, the average individual often discards the old paint-hardened brush and buys a new one when another paint job is to be done.

However, with more frequent calls upon his painting skill, the amateur, like the professional painter, has come to learn that proper cleaning and storage will greatly prolong the life of paint brushes. In these days of increased costs, he is also finding out that it often pays to restore an old hardened brush with one of the paint brush cleaners designed to do such a job.

Although prices have come down during the last year, a good paint brush remains an expensive item. This is quite understandable in view of the fact that paint brush production is still an age-old craft modified only to a limited degree by modern industrial technics. (2) Another factor contributing to paint brush costs is the erratic and undependable supply of Chinese hog bristles, long considered best for making superior brushes. When the war cut off the supply of Chinese hog bristles, a variety of materials were tested for use in paint brushes. Some served only as stop-gaps, but three—casein, cellulose acetate, and nylon—show promise for permanent acceptance. Nylon brush filament, for example, is said (3) to equal natural hog bristle in most qualities and to surpass it in some respects.

While the further use of such bristles may stabilize and perhaps reduce the price of paint brushes, it does not obviate the need for the proper selection, use, cleaning, and storage of these tools. Selection of the right kind of brush is important. As remarked by Currie, (4) too large a brush cannot be handled by the average amateur, while too small a brush will not carry the paint; alternately flooding and starving the surface.

A good brush of the right size is a definite asset to any painter and by following simple methods of cleaning and care it can be used over and over again. Carrick (5) has pointed out that by taking good care of a brush between jobs it will last a long time and will give efficient service. If properly cared for between paint jobs, a good brush will work effectively until its bristles have worn to half the original length and even then it may be used on various kinds of rough surfaces.

Skilled painters know that no new brush should be dipped into paint and put to work without first being cleaned. (6) Before a new brush is used with oil paint or varnish, it should be well shaken to remove loose hairs and dust. This can be done by working the bristles briskly back and forth through the hand. The brush should then be carefully combed straight; a steel comb being recommended for the purpose. The brush may also be washed with turpentine or mineral spirits (painter's naphtha). It has been suggested that new brushes be soaked in linseed oil for about 12 hours before being put into the paint. The surplus oil should be pressed out of the brush before painting. (7)

The best time to clean brushes is immediately after use. Most expert paint contractors clean their brushes after every job to insure satisfactory service and to cut down time losses. A method generally used by many painters is to wash the brushes immediately after use in turpentine, benzene, gasoline, or other solvent. Unless a "general purpose" paint brush cleaner is used, the choice of solvent

cleaner will often depend on the coating material being removed—whether oil paint, varnish, lacquer or shellac.

Such a procedure is satisfactory for brushes that are in general use, but a somewhat more elaborate method is employed for brushes that are to be stored for future use. The procedure is essentially as follows: First, as much paint as possible should be wiped off the brush. Then it should be washed in turpentine or special paint brush cleaner until all paint is removed. Allow to dry, the brush being laid flat with all bristles straight. It may be necessary to follow this procedure by a final washing with soap and warm water. (7) As a matter of fact many authoritative sources. (5, 8, 9,) advocate a thorough washing in soap and water; making certain that all the paint is washed out of the bristles up next to the ferrule. After rinsing, the excess moisture is shaken off and the bristles allowed to dry.

After the brush has been thoroughly cleaned and allowed to dry, it should be wrapped in paper and laid flat on a shelf. Government experts (7) consider it advisable to place a few moth balls near the brushes. Another valuable hint is given by Craemer. (10) Before putting his brush away he suggests that it be stroked back and forth over a wet cake of mild soap. Then, when the brush is to be used again, the soap is washed out with warm water; leaving a soft, clean brush. This last may cause raised eyebrows among professional painters, but the idea is not new. A similar suggestion with regard to the softening action of soap appears in one of the older reference texts. (11) Also noteworthy is a recommendation (12) that cleaned and stored brushes should be removed occasionally and oiled with linseed oil. This, it is said, will help to keep them in excellent condition.

As already indicated, brushes used for applying certain types of surface coatings, require special consideration. Varnish, for example, sets quickly and is very difficult to remove once it becomes hard. Therefore, varnish brushes should be cleaned promptly after use; using the solvent thinner recommended by the manufacturer of the varnish. Lacquers, which also dry rapidly, may be removed from brushes with acetone and naphtha. Brushes which have been used in shellac should be cleaned immediately in denatured alcohol or they will harden in about thirty minutes.

With good paint brushes expensive and the source of bristles undependable, effective paint brush cleaners can find a ready market in these times of large-scale building activity. Petroleum solvents are important in formulating cleaners for paint brushes.

Brushes used with water paints and white wash or calcimine need only be washed with soap and water. Such brushes should be absolutely dry when put into service to give satisfactory results. With some of the new resin-oil emulsion paints that are quite popular, it is necessary to wash the brush with soap and water before the paint dries. (7)

An uncleaned, neglected paint brush becomes hard and stiff. In some cases, it is almost impossible to clean such brushes and restore any degree of flexibility to the bristles. However, many paint and basement workshops have potentially useful brushes lying about. (13) A number of methods and materials are available for cleaning and softening brushes which might otherwise be considered a total loss. Some people try to soften a stiff brush in paint, but this seldom works.

PAINT and varnish removers have been used successfully to reclaim brushes that contain hard and dry paint or varnish. Products for this purpose, including solvent type and alkaline type paint and varnish removers, have already been discussed in *Soap and Sanitary Chemicals*. (14) One simple procedure is to immerse the brush in an organic solvent type paint and varnish remover for 24 hours. The brush is then removed and the softened paint is scraped out with a putty knife or steel comb. The brush should then be washed free from paint; small particles being removed by submerging the brush in turpentine and working the liquid through the bristles. (7)

Such paint and varnish removers are not specifically intended for brush cleaning. In addition to the solvents, they generally contain some film-forming or coating agent to prolong action on large surfaces. More effective therefore for reclaiming hardened paint brushes are various individual solvents or the blends of solvents which comprise commercial paint brush cleaners. For example, hardened, oil-base paint can be softened by soaking the brush over night in a solvent type brush cleaner or in a good grade lacquer thinner. If the paint is not too hard, turpentine or gasoline may be used.

The solvent-softened paint is then removed with a putty knife or a steel painter's comb. If properly done, this step should clean out all of the paint pigment right down to the setting. This is followed by a thorough scrubbing with a good, neutral soap. Thorough scrubbing is essential to remove remaining paint particles. When cleaned, the brush is rinsed, first in hot, then in cold water, repeating until all traces of soap are removed. Excess water is shaken out. Combing the bristles immediately after cleaning removes all twists and curls, wrapping the brush in heavy paper keeps the bristles straight. Thorough drying before use is especially important because paint will seal moisture inside the bristles, causing them to lose the resilience that is so important in quality painting. (13)

Although their use is frowned upon by some experts, alkaline solutions are quite effective for cleaning

paint-hardened brushes. However, solutions containing caustic soda or caustic potash should not be used for this purpose. Powders consisting of trisodium phosphate, sodium carbonate or the mixtures of the two are widely sold for restoring hardened paint brushes to a large degree of usefulness. As pointed out by Rayner, (15) these mixed powders are remarkably effective, even very old brushes often responding to a soaking in a solution of the cleaning powder. After such treatment, the brushes should be thoroughly washed with soap and water.

Another tip on reconditioning neglected brushes is given by Creamer. (10) He suggests that the brush be placed in vinegar and that it be allowed to remain in the boiling vinegar for 10 or 15 minutes. This may cause bristles to fall out of inferior quality brushes, but it will soften them considerably. A good washing in soap and water should complete the reconditioning of the brushes.

From the foregoing, it is evident that there are two main types of paint brush cleaners. These are the organic solvent liquid preparations and the alkaline products which are usually sold as powders for addition to water. Somewhere in between are the emulsion type paint brush cleaners. Plain soap and water is, of course, the standard cleaner for brushes used with water paints and it is a valuable adjunct to other types of paint brush cleaners.

CERTAIN solvents, used undiluted, have long been packaged and sold as liquid paint brush cleaners. Turpentine is, of course, the best known example of such a product. It has well established value for this purpose, being used by both the professional and amateur painter. Kerosene has been suggested (9) as a less expensive substitute for turpentine in paint brush cleaning. However it has some objectionable features, among which is its lack of miscibility with most paints. This is perhaps not too important provided the kerosene is thoroughly rinsed from the brush.

Other petroleum fractions are quite well suited for use as paint brush cleaners. Perhaps the best known is mineral spirits or painters' naphtha, which is available under a number of trade names. Quite efficient as a paint brush cleaner, its wide range of usefulness is much better known to the contract painter than to the occasional brush wielder.

Benzol or benzene is another solvent frequently used by painters for general cleaning, including the removal of paint from brushes. (16) Amyl acetate has long been valued by old-timers because of its effectiveness in removing paint and varnish from brushes. There has been frequent favorable comment on the speed and efficiency with which this solvent works. (6, 16, 17)

In addition to these familiar materials, there are many other petroleum derivatives and synthetic organic solvents that have found their way into the formulation of paint brush cleaners. In many cases, particularly among proprietary products, the brush cleaners consist of blends of solvents. The use of solvent mixtures has the advantage of providing a more rounded effect against a larger variety of coating or finishing materials. Generally all that is required is that the brush be immersed in one of these liquids to just cover the bristles; occasional working of the brush hastens the cleansing action. The immersion time depends on the amount of hardness of the paint on the brush but generally the soaking period is 24 hours. All loose paint is then removed from the brush, preferably with a steel comb. If the cleaning has been thorough, the bristles will remain soft when dry.

Easy to prepare, three typical formulas for making good brush cleaners have been listed by the National Bureau of Standards, (8) as follows; all proportions being in parts by volume.

I.

Benzol	2 parts
Alcohol, denatured	1 part
Acetone	1 part

II.

Acetone	1 part
Toluene	1 part

III.

Methylene chloride (dichloromethane)	5 parts
Alcohol	1 part

Somewhat more elaborate and containing other types of materials is the following paint brush cleaning solvent suggested by Crowley: (18)

Solvent naphtha	50 parts
Methyl acetone	40 "
Normal butanol	7 "
Butyl "Cellosolve"	3 "

If desired, the methyl acetone may be replaced in the above formula with the following mixture:

Acetone	50 per cent
Methyl acetate	25 " "
Methanol	25 " "

Interesting, but rather specialized is a wash for nitrocellulose dope brushes. Said (19) to have been recommended by the British Air Ministry for this purpose, the cleaner consists of:

Alcohol	25 parts
Benzene	25 parts
Acetone	50 "

ANOTHER type of liquid brush cleaner is available in the form of emulsions. Such products have the advantage of combinining a solvent action and detergent effect in one preparation. Thus the cleansing operation is facilitated and the product is generally effective against a wider range of paints and finishes. Undoubtedly the most frequently cited (18, 20, 21) formula for a product of this type is given below:

Kerosene	1 gal.
Oleic acid	½ gal.
Ammonia solution, strong (28%)	1 pint
Alcohol, denatured	1 pint

Mix the kerosene and the oleic acid. In a separate vessel mix the alcohol and the ammonia. Stir the ammonia-alcohol mixture into the kerosene solution and continue to stir until a smooth product is formed. In use, the brushes are allowed to stand in the mixture overnight for which they are washed out with warm water.

A modification of this paint brush cleaner, recently suggested by Bennett, (22) is made as follows:

Kerosene	4.0 parts
Diglycol oleate	2.0 parts
Ammonia	0.5 part
Alcohol	0.5 part

This is prepared and used in the same manner as the previous product. Alkaline paint brush cleaners are generally recommended as being particularly suitable for cleaning and reclaiming hardened paint brushes. Trisodium phosphate is often sold for this purpose, generally being used in a ratio of two pounds per gallon of water. (16, 17) However, half this concentration will also produce a quite satisfactory effect for softening paint on brushes. Thorough rinsing in running water is essential after the brushes have soaked in the trisodium phosphate solution.

Brushes which have become very hard and are not amenable to the action of other cleaners may often respond to the effects of a solution consisting of one part of sodium carbonate in three parts of water. The action on the suspended brushes should be allowed to proceed in a warm place for from 12 to 24 hours. The process will loosen the paint, which then can be washed off with soap and water. (6, 16)

These two alkalies are often sold in mixtures of varying proportions. For example, a mixed alkali type paint brush cleaner may be made from: (20)

Trisodium phosphate	80 parts
Sodium carbonate, anhydrous	20 "

While trisodium phosphate and soda ash form the basis of most paint brush cleaners sold in powder form, other compounds may be used in conjunction with these materials. For example, certain rosin salts (Dresinates) have been suggested (23) for use in conjunction with alkalies to improve the effectiveness of paint brush cleaners.

It is not commonly appreciated that ordinary soapy water, especially if used hot, will loosen much paint from recently used paint brushes. Alkaline soap powders, which contain sodium carbonate with or without other alkaline builders, are classed as good paint removers, especially in hot solution. (17) In an older reference source, (6) it is suggested that a hard paint brush may be softened by standing it in a pot of soft soap and cleaning in warm water. The brush is afterwards cleansed in benzene.

BRUSHES that are used frequently generally do not warrant the degree of cleaning required for extended storage. With such intermittently used brushes, it is common practice to suspend them in a vessel with a closely-fitting cover, containing a liquid that prevents the paint on the bristles from becoming dry and hard. The bristles are completely submerged in the liquid, but should not touch the bottom of the vessel.

Commonly known as "brush keepers," such containers are easy to make or they can be purchased from painters' supply houses. Quite indicative of current conditions is the fact that an inexpensive brush keeper, complete with suspending bar and a suitable liquid is now being sold in department stores along side paint brush cleaners and other paint supplies.

The brush care liquid may consist of turpentine, kerosene, or linseed oil. (5, 9) The Government paint manual (7) suggests the use of a mixture of raw linseed oil and a small amount of turpentine. One standard reference text (20) has the suggestion that paint and enamel brushes may be kept in a 50-50 mixture of turpentine and linseed oil. The same mixture can be used for keeping varnish brushes. Lacquer brushes can be kept in lacquer thinner, and shellac brushes in alcohol. When taken out of the brush-keeper, brushes for paint, enamel or varnish should be rinsed carefully in clean solvent before being used.

Of pertinent interest are slip-on Pliofilm jackets for paint brushes. Recently placed on the market, these containers are said (24) to simplify the storage of paint brushes after use, regardless of whether they are cleaned or not. In uncleaned brushes, the oil in the residue paint itself is claimed to keep the bristles soft and pliable. An elastic band at the top of the container serves both to make an airtight seal and as a means for suspending the brush. The containers have been tested with a variety of thinners. In these tests the Pliofilm jackets resisted all chemical reactions and the brushes were kept in condition for instant use.

Novel and interesting is a protective preparation suitable for use on brushes. Though primarily intended as a skin protective for painters and mechanics, it is claimed in the patent (25) that the following solution can also be used effectively on bristles:

Gelatin	1.2 per cent
Glycerine	0.8 " "
Ammonium alum	0.5 " "
Potash alum	0.5 " "
Citric acid	0.4 " "
Water	95.6 " "

Applying this solution to paint brushes makes the removal of paint, lacquer or the like a comparatively easy matter; soap and water being all that is necessary to clean the bristles.

Bibliography

1) Anon.: By Gum! 16: 1, Aug.-Sept. 1946

2) Maisel, A. Q.: Pop. Science, Feb. 1943, p. 112

3) Anon.: Ind. Bull. A. D. Little, March, 1947, No. 230

4) Currie, K. D.: Pittsburgh Plate Glass Prod. 56:17, Jan-Feb. 1948

5) Carrick, L. L.: "Farmer's Paint Bulletin," N. Dakoto State Lab. Dept., Bull. No. 62, 1941, pp. 51-2

6) Hiscox, G. D. & Sloane, T.O'C.: "Twentieth Century Book of Formulas," New York, Henley, 1938, pp. 140-1, 189, 490

7) Walker, P. H. & Hickson, E. F.: "Paint Manual," BMS 105, Washington, Nat. Bur. Standards, 1945, pp. 102-4

8) Anon.: "Paint and Varnish Removers," LC749, Washington Nat. Bur. Standards, 1944, 6 pp.

9) Anon.: "Materials for the Household," Circ. No. 70, Washinton, Bur. Standards, 1917, pp. 127-8

10) Craemer, J. B.: "Handy Household Manual," New York, Ziff-Davis, 1946, pp. 158-9

11) Hopkins, A. A.: "Scientific American Cyclopedia of Formulas," New York, Munn, 1932, p. 347

12) Anon.: Agric. News Letter (DuPont) 16:36, March-April, 1948

13) Anon.: Paint Prog. 2:No. 4, p. 11

14) Lesser, M. A.: Soap & Sanit. Chem. 22:153, June, 1946

15) Rayner, A.: Soap, Perf. & Cosmetics, July, 1940, p.437

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What's Behind the

TALLOW PRICE ADVANCE?

THE market for soapmaking fats and oils, particularly tallow and grease, has passed through an active series of maneuvers over the course of the past month, the gyrations being traceable as usual to changes, or the threat of changes, in the export allocation picture. The quarterly meeting of the Fats and Oils Industry Advisory Committee, serving under the direction of the U.S.D.A., was held in Washington, June 2, and oddly enough it was just at this point that tallow quotations started on their upward path, jumping from 13 to 17c per lb. within forty-eight hours.

An important factor in this advance was of course the fear that the Department of Agriculture, under pressure from the renderers, might authorize the export of substantial quantities of tallow during the third quarter. The soap industry has not been quick to forget the impact of the tremendous fourth-quarter, 1947, allocations. Soapers still recall quite clearly the way tallow and grease doubled in price within the short period of a month, when it was announced that domestic stocks of fats and oils would be seriously depleted by heavy export shipments.

The brief run-up in tallow prices last month may well have been an insurance buying program against the threat of a possible repetition of that situation. When the comparatively modest third-quarter allocation totals were announced, however, the string was pulled rapidly on this incipient market boom, and the necessity for soap makers paying a premium for tallow stocks vanished, at least for the time being.

Comparing allocation totals for the past four or five quarters may well be a prerequisite to evaluating the current situation. The current figure, for third quarter, 1948, is 90,400,000 lbs. For the second quarter of this year export allocations totaled 162,200,000 lbs., for the first quarter, 111,900,000 pounds, for the fourth quarter of 1947 the tremendous total of 452,500,000 lbs. and for the third quarter of 1947, 299,800,000 lbs.

With the announcement of the rather modest allocation totals for the third quarter of this year, the advance stopped abruptly, and as a matter of fact tallow has sold off a cent per pound or so from the highs reached in mid-June. The opinion seems quite general in the trade, incidentally, that a rather good job was done by the U.S.D.A. under the circumstances in fixing the export totals, and the amounts decided upon seem to leave the situation about neutral between bullish and bearish influences, although, to be sure, the producers of tallow and grease are still vehement in their demand that export totals be increased, perhaps by the means of supplementary or "emergency" allocations.

A strong factor in the brief but spirited June tallow advance was the reported entry of two of the largest soap companies into the tallow market in a big way. They are reported to have bought some 150 tanks in the course of the advance, while a third important buyer was more or less inactive, having presumably accumulated heavier stocks around the 13c level.

Ever since the post-war world fat sharing program was adopted, the quarterly meetings of officials of the Department of Agriculture to fix allocation totals, have necessarily become an extremely important market influence. And the industry advisory conferences, which precede actual fixing of the allocations, have provided a battleground for opposing interests where the battle has been contested more vigorously and more openly with each passing quarter. The most recent conference found the renderers lined up on one side, two soap associations on another, and representatives of the edible vegetable oil group defending a completely different set of interests.

THE renderers case was well presented by a representative of the National Renderers Association who argued in part as follows:

There is currently an unrealistic price situation involving tallow, lard and coconut oil. Normally the overall differential between the three products is not large; as recently as last February the overall price spread was 2c to 3c per pound, all three items being priced in the neighborhood of 18-19-20c. Since then, tallow has declined to 13c per pound (As of early June. —Ed. Note) while coconut oil has advanced to 26c per lb.

Typhoon damage to Philippine coconut groves was an important factor in the coconut oil price advance, while the price decline on tallow is directly traceable to increasing stocks, which were 263,000,000 lbs. in January, 1948, 278,000,000 lbs. in February, 300,000,000 lbs. in March and 320,000,000 lbs. in April. The March 31, 1948 stock figure was approximately 125,000,000 lbs. above the comparable total for March 31, 1947. One reason for the increasing stocks of tallow can be found in the decline in soap sales during the first quarter of 1948.

If there is a world-wide scarcity of fats and oils, the representatives of the renderers argued, it is only logical that the needed material be placed where it is not a drug on the market. With tallow being exported from the Argentine at 27c per lb., it is hard to justify forcing American producers to sell at 13c per lb. Export barriers which prohibit American producers from com-

peting equally in world markets, they say, should be eliminated.

Representatives of tallow and grease producers argued that while their industry is not interested in "high" prices for these products, they do feel entitled to a reasonable return somewhat on a parity with the prices of other customarily related fats and oils. This, they feel, the government could readily accomplish through its export control powers.

Of course, government officials have repeatedly declared that export controls are not intended or designed to be used as price controls, but the fact is, of course, that control over exports and imports, which gives effective control over supply, carries with it an effective control over price. This truism, which any business man will quickly acknowledge, might well be admitted by government officals publicly as well as privately.

The soap industry's rebuttal to the fat renderers' case was prompt, strong, and equally well founded. A representative of the Soap and Detergent Manufacturers Association pointed out that it has not been the intent of Congress that fat and oil export authority be used for the purpose of creating a scarcity of supply and raising the domestic price level. Big export allocations of tallow, he pointed out, would simply mean that the larger soap makers would compete for the remaining supply of fatty acids and soapstocks to the disadvantage of the smaller companies in the industry. He charged that the renderers, in seeking a substantial increase in export allocations, were motivated by a desire to drain off supplies from the domestic market, thus creating higher prices here and adding to the cost of living on an essential commodity, soap.

Any exports of inedible tallow and grease, he argued, should be limited to that quantity clearly surplus over and above domestic requirements. And no soapmaking fats and oils should be exported, he urged, other than such surplus tallow and grease stocks. He expressed a sharp disagreement with the renderers position as to the existence of any "large" surpluses, pointing out that stocks of tallow and grease, as well as other soapmaking oils, are far below normal peacetime levels, and only slightly above the lows held during the wartime period.

Quoting from the more recent historical background, the spokesman for this soap group pointed out that the interests currently recommending a big increase in fat and oil export allocations are the same group who a little less than a year ago advocated the same proposals, with the result that when the large allocations were granted (4th quarter 1947), tallow and grease prices in the domestic market doubled within the short space of a month.

In any case, argued the spokesman for the Soap and Detergent Manufacturers Association, if any substantial quantities of inedible fats and oils are to be exported, they should be exported in the form of soap, and not as soap making raw materials which might within a short time come back to compete with American soap makers either in this market or in the export field.

A SIMILAR statement was entered for the Association of American Soap & Glycerine Producers by George A. Wrisley, its president. Said Mr. Wrisley, "Based on the 1947 production of soap, there is serious doubt that present stocks and exported production of inedible animal fats will take care of soapmaking requirements for the balance of this year."

He also reminded that little tangible benefit will result to the American housewife, who has supported the American Fat Salvage plan, if actual or prospective surpluses of inedible fats are immediately allocated for export. In any case, he added, if inedible fats are to be exported, his association is in thorough accord with the policy of the Department of Agriculture "in exporting finished products of raw material wherever possible in order to give the United States economy the benefit of any processing."

This subject of fat salvage, incidentally, is apparently one which is currently giving the tallow producers increasing concern. While paying credit to the fat salvage program as an important wartime effort, and highly essential in solving the wartime fat scarcity, they are apparently a little unhappy to see the program now contributing to what they feel is an unjustifiable accumulation of stocks of inedible fats. In their statement before the Washington conference, June 2, they referred specifically to the fact that fat salvage is currently accounting for about ten percent of domestic production of inedible tallow and greases, and asked specifically that, as a minimum, monthly export allocations of inedible tallow and grease be approved for the average quantities of household grease salvaged monthly. Their ideas as to the size of the export allocation were not met, of course, by the initial figures for the third quarter announced June 16 by the Department of Agriculture.

The announcement of the allocation totals for the third quarter, would seem to resolve the situation, at least for the next three months. The reaction of the tallow market, however, which has been but a minor one, has given some observers the impression that the last word has not been said as to how much tallow, surplus or not surplus, will be exported. There is another door still open, labeled "emergency allocations" which the U.S.D.A. might have in mind using, and which they will certainly be under continuing pressure from the renderers to use.

In the first quarter of 1948 approved allocations of tallow and grease were but 4,400,000 lbs., yet exports totaled 8,100,000 lbs., the balance being on the "emergency" list. In the second quarter the story was allocation of 11,100,000 lbs. and actual shipments of 27,200,000 lbs. The same situation can and probably will develop in the third quarter, as producers of inedible tallow and lard, particularly from the west coast, keep up their strong pressure to have local surpluses taken off the market.

Joins Quaker Chemical

Joseph A. Korany recently joined the research and development laboratories of Quaker Chemical Products Corp., Conshohocken, Pa. He will undertake market studies, including field testing, of new products and new applications of old products.

Glass Wax Sales Success Brings Imitation, Lawsuits

CURRENT advertising and merchandising of Glass Wax, product of the Gold Seal Co., Bismarck, N. D., dominates the discussions and plans of the American chemical specialty industry, especially among manufacturers of glass cleaners and the various and sundry metal polishes. That the product has taken the glass market by storm and set the entire industry by the heels is no secret. That imitations have been scrambling to get on the market and also bask in the sunlight of the present estimated $4,000,000 annual sales for the Gold Seal product, is quite apparent. That half of the manufacturers of brass and silver polish, floor waxes and other polishing and cleaning specialties have been mentally kicking themselves in the pants these many months because they did not think of the idea or the product is confirmed by discussions with a number of them.

Gold Seal Glass Wax as a marketing project has simply pulled a very successful quarterback sneak. Before the industry as a whole awakened to what was going on, the merchandising touchdown had been scored. Reaction in the trade has been varied. Some competing manufacturers are blunt in their praise of the product and even more so of the marketing job. Others reflect a little of the sour-grape attitude. Still others deny that the product is new. Said several of the latter: "Why the product is the same as the old brass polishes which we have sold for thirty-odd years, except the abrasive is softer and a quick-evaporating solvent has been added. In fact, more than twenty years ago, we sold and recommended this same general type product cut fifty per cent for glass cleaning. Building porters often used ordinary brass polishes for glass cleaning as well as metal cleaning. Neither the product nor its method of use are new."

Whether Glass Wax is new or not may be a factor in determining the course of several law suits now pending regarding the use of the words, "glass wax," in connection with a glass cleaner which supposedly contains no wax. Obviously competitors have been climbing on the band-wagon mostly in an attempt to cash in on the success of the Gold Seal Company. Until they popularized the name, there seems to be no record of others having used it. There seems to be little doubt in the trade that those who use the words, "glass wax," in their product name are doing so with the express purpose of imitating directly the Gold Seal product. But this appears inevitable in the marketing life of successful retail products, especially chemical household specialties. The belief seems quite widespread, however, that the term, "glass wax," was originated by Gold Seal, is a coined phrase, and is not descriptive of the product inasmuch as it contains no wax. These matters, the courts eventually will have to decide.

As Marketing Authority Sees It

THE effects of the advertising, both radio and newspaper, the marketing success, the pending lawsuits and other backgrounds of the product which jumped from scratch to over $4,000,000 sales per year within five years were discussed by Merle Kingman in some detail recently in *Advertising Age*, the marketing authority published in Chicago. Here are some of the Kingman comments

"The magic product has a magic word—glass wax—a name so good that at least half a dozen companies are using it in defiance of its originator. One court battle is scheduled to begin hearings here very soon and several more threaten, to decide whether one company or all shall use the name—or whether it can be used by anyone on a product that all admit contains no wax whatever.

All of the companies, whose sales are already running into the millions, claim that their "glass wax" is an amazing new chemical discovery that cleans windows miraculously without rubbing—just apply the liquid, let it dry and wipe it off. It does the same they say, for silverware, brass and other metals, in addition to various household surfaces such as porcelain and tile.

Apparently the claims are true. Originator of the name and the first company to market the cleaner, the Gold Seal Company, Bismarck, N. D., rang up more that $1,000,000 in sales last year and is currently estimated to be running at a $4,000,000 annual clip, at retail prices. Market operations make it difficult to obtain an exact total, but trade sources who have studied the picture closely say that this estimate is conservative

Founded on a shoestring several years ago by 38-year-old Harold Schafer, president, the company has watched its sales skyrocket as it invaded market after market until today its glass wax is sold in most of the states. Its value has been listed at a quarter of a million dollars, a figure that undoubtedly is already outmoded.

The company claims that more than 3,500,000 cans of its glass wax have been sold throughout the country. A spokesman said that within 10 weeks after the company ran the first of a series of full-page ads in Chicago newspapers as a test last September, 44 out of 100 families purchased it in this area. The data was obtained by a blind survey in which 600 letters were mailed to telephone addresses asking if the family had purchased the product. Of 225 replies, 44% said yes. Sales figures here in the same period bore out this ratio, which is much higher today, the spokesman declared.

Despite this prosperity, the various makers of glass wax are suffering bruises—in the market place and the courts. One large manufacturer of furniture wax, it is understood, is considering asking the Federal Trade Commission to put a stop to the use of the glass wax name entirely on grounds that its use on a product containing no wax is an unfair trade practice.

Competitive Situation

OTHER furniture wax manufacturers are studying developments closely and debating whether to enter the fray, although many deny any interest. A spokesman for S. C. Johnson & Son, Racine, Wis., maker of Glo-Coat, said that the company has "no plans to manufacture glass wax, because it is outside our field."

Actually, each of the glass wax manufacturers has a different formula that it claims is exclusive. Gold Seal claims that none has been able to duplicate its original product. Assertions by some companies about competitors have included charges that "their stuff is just the residue drained off their oil line of silver polish" and "that product has been sold as metal polish for 50 years." The truth remains to be proved, but certainly Gold Seal has spectacularly captured a major part of the market to date.

Two new competitors are the Bril-Yant Products Corporation, which began advertising and distributing its Waldorf glass wax through Stineway Drug Stores last February, and the Glass Wax Corporation, which began using newspapers and radio here last month on its Flash glass wax. Both are now distributing nationally. Another is R. E. Robertson & Co. here, which has just been formed to sell Sparkle Plenty glass wax.

All have one thing in common —coyness about competition. Any suggestion of the mere existence of competitors, especially of pending litigation involving two of them, gets the reporter only a fish eye and a wide berth from spokesmen of any one of these companies.

One of the current court cases involves the Bril-Yant Products Company which must defend itself against court claims by the Gold Seal Company of treble damages and all profits from use of the name, glass wax. Gold Seal charged in court that its competitor's product is "spurious" and that its maker has fraudulently conspired to copy the term—which Gold Seal claims has been its trademark for years—and to counterfeit the dress of Gold Seal's package.

Bril-Yant Products, in its turn, claims that the older company is trying to monopolize "glass wax." Litigation began last April in federal district court when Bril-Yant Products filed a complaint in which it asserted that glass wax has "no trademark significance whatever" because it allegedly is a "common, descriptive or generic name."

Gold Seal filed an answer and counterclaim last month, alleging that the term is "arbitrary and fanciful and not descriptive," that it has been registered as a trademark in "nearly all" the states, including Illinois.

(The suit and counterclaim should provide another of several current court tests over whether trademarks are protected under the Lanham Act simply through registration in the U. S. Patent Office.)

Gold Seal seeks an injunction restraining Bril-Yant Products from publishing or using in advertising the glass wax name and forcing it to "deliver up and destroy" all labels, packages and ads containing the name.

A hearing was scheduled to begin June 30.

Several weeks ago, Gold Seal ran a full-page editorial-type ad in Chicago newspapers heralding its glass wax as "the window-cleaning marvel of the age" that "dissolves 30 kinds of dirt in 30 seconds." (Company chemists, the ad avowed, found that windows accumulate 30 kinds of dirt.) At about the same time, Bril-Yant used newspaper space to say in headlines that "Waldorf glass wax cleans glass in seconds."

Gold Seal Background

THE history of Gold Seal began in 1942 when President Schafer forsook his paint jobbing activities to found the company on $2,000 and began making floor wax and furniture polish. For two years the company's operations were unmarred either by spectacular growth or revolutionary products.

Then, in 1945, Mr. Schafer obtained rights to use a chemical developed during the war to clean fighter plane windshields. Naming it Gold Seal Glass Wax, he tested it successfully for two years in the Twin Cities, Duluth and Salt Lake City.

In the same period, he was distributing his three other floor and furniture polishes in the Dakotas, Minnesota, Montana, Wyoming and Idaho, spending $5,000 a month on radio and newspaper advertising, placed directly (AA, Dec. 17, 1945). In 1947 he opened a sales office in Chicago, appointed Campbell - Mithun, Minneapolis and Chicago, to handle the account and opened a drive with a full-page newspaper ad and selective radio. In little more than a month, 200,000 cans had been sold here.

As demand grew among retailers as well as the public, the company began supplying Macy's, Gimbel's and several other large stores and chains in New York. Last year $20,269 was spent on newspaper advertising, and in the first quarter of this year distribution was expanded to the Ohio valley and elsewhere until most of the states were covered.

The company opened 130 new markets this spring, including St. Louis, and every major market east of the Mississippi and north of the Mason-Dixon line. Texas was opened in the Southwest. The company now has some 15 or 20 district sales offices through which the product is distributed to wholesalers, department stores and chains.

The line is carried by a wide variety of retailers such as drug, grocery, hardware and novelty stores. Evidence of just how wide that variety has become are the beauty parlors and barber shops where it first was sold in gallons for cleaning mirrors. Beauty operators and barbers praised it to customers who soon created so strong a demand that some beauticians, reluctant to let the corner druggist or grocer get all the gravy, began retailing it themselves in pint and quart sizes."

Lever Expansion Plans

Luckman review of the past two years as president of Lever Brothers reports 51 percent increase in sales, wage increases up to 40 percent, top sales spot for "Lux". Plan new Coast Plant.

EXPANSION plans of Lever Brothers Co., Cambridge, Mass., which include an expenditure in excess of $20,000,000 for additions to production facilities at Cambridge, Baltimore and Hammond, Ind., and the construction of a new synthetic detergent plant at Edgewater, N. J., were revealed recently in a review of the company's activities over the past two years under the presidency of Charles Luckman. At the same time it was announced that Lever Brothers had purchased John F. Jelke Co., Chicago margarine firm, the fourth acquisition of the Lever company in the past two years.

Lever sales have increased 51 percent since 1946 and three of the company's soap products are now leading in their respective fields, according to Mr. Luckman. "Lux" is now the largest selling fine toilet soap in the U. S.; "Rinso," the best selling granulated soap; and "Lux Flakes," hold top spot in the fine fabric soap class.

The introduction of a new, all-purpose, general household soapless detergent, "Surf" was launched in 11 mid-west markets late in June. Another Lever synthetic detergent, "Breeze" has achieved second place in the hard water areas in which it is marketed, the Lever president stated.

The new synthetic detergent plant in Edgewater, N. J., is located near the company's edible oil refining and shortening plant there.

As a part of efforts to boost production in Lever plants, the company has raised the average hourly pay for plant workers 40 percent, stenographers's salaries 35 percent and salesmens' salaries 40 percent, as well as given substantial increases to other office and plant people.

In addition, new health and welfare benefits have raised the standard of Lever's 7,000 employees to a very high level in American industry. Over and above an average hourly wage of $1.58, workers now receive up to 26 weeks sick leave at full pay; three weeks vacation after 10 years service; a company paid insurance and pension plan; and paid lunch and rest periods. During the past year a new modern cafeteria was constructed at Lever House in Cambridge, at which time a new policy was established for all company restaurants and plant cafeterias whereby complete, nutritious meals were made available to all employees at the cost of the food only. The remaining cost of operating the restaurants is borne by the company and last year cost $360,000, according to Mr. Luckman.

It was further pointed out by the Lever president that formulas for six Lever products: "Lux Flakes," "Rinso," "Silver Dust," "Spry" "Swan" and "Lifebuoy" were improved. Packages of all Lever products have been redesigned and other new products are in advanced stages of development.

Advertising technique was changed during the past two years and new advertising campaigns, backed by a 50 percent increased appropriation, have been launched on all products. A significant shift in advertising media was made in reducing a 70 percent advertising budget for radio to 50 percent for that media and 50 percent for publications. The company's radio advertising shows during the 1947-48 season made a good showing for themselves, when all six were among the first 15 in popularity. They are: "Lux Radio Theatre," "Amos 'N' Andy," "Bob Hope," "My Friend Irma," "Aunt Jenny," and "Junior Miss."

In announcing the purchase of John F. Jelke Co., which follows the acquisition recently of the cosmetic business of Armour & Co., Chicago; the purchase of Harriet Hubbard Ayer, Inc., New York, believed to be the oldest cosmetic firm in the U. S.; and the buying of the "Rayve" and "Hedy Home Permanent Wave" lines of William R. Warner Co. New York, Lever continued its program of diversification. The Jelke company produces, in addition to margarine, bulk shortening, a mayonnaise, a salad dressing and a sandwich spread, all under the trade name of "Good Luck." New items will be added to the Jelke line in the near future, Mr. Luckman states.

New Lever Calif. Plant

Lever Brothers will build a big plant on the west coast to cost over $10,000,000. It is understood the plant, which will turn out soap among other things, may be situated in the Los Angeles area. A Los Angeles newspaper recently printed a story that the site owned by Chanslow-Canfield Midway Oil Co., west of Crenshaw Boulevard, Los Angeles, was being studied as a possible factory location.

Management's Responsibility to EMPLOYEES

By Richard R. Deupree*
Procter & Gamble Company

IN formulating my thoughts concerning the responsibility of management to the employee, I constantly find myself working toward an ideal relationship that you might call a "business utopia." You might see no similarity between it and today's business headlines, or yesterday's, or tomorrow's. Nevertheless, events are moving in this direction—business has made remarkable progress in the last several years.

A clear thinking, understanding management that is interested in, and knows the employees and their problems has certain responsibilities. Five points which I consider of primary importance are:

1. A successful business—one that earns regular profits.
2. Steady employment.
3. The opportunity of the individual employee to develop to the fullest extent of his abilities.
4. The employee's chance to become a capitalist.
5. Good working conditions.

I'll admit that these objectives have never been reached completely by any one employer, though a great number of companies have taken important steps in this direction. Gains have been made and are constantly being made toward realizing these responsibilities of management. The first step is management's recognition of the problems of labor; studying the causes and effects in helping to solve those problems. The newer labor leaders must realize their responsibilities, too; they represent a new kind of management on a gigantic scale in their unions.

We have passed through fifteen of the most difficult years in the history of this nation. No one can doubt that labor has made more gains in those fifteen years than were made in any period three times fifteen.

Today the great difficulty, as you and I know, is to have a sensible meeting of minds between employers and employees on a realistic basis to solve problems in a sane, fair, and equitable way. This is a very difficult thing to do with certain situations as they exist in some industries in this country today—but, again I say, real progress is being made.

Some firms like ours have labored for years to work out reasonable and satisfactory relations with employees. Others have not had those years of experience. Some men in our company have spent almost their entire business lives working on that important phase of our business. Some of the groundwork was laid years and years ago. For example, we had a profit-sharing plan for employees in operation as early as 1887. Many other companies have spent years in working out satisfactory relations with their employees. In any organization, it's a slow and gradually evolving process, a process which takes years and, with human nature as it is, one that never is fully completed. With many businesses the groundwork is hardly laid and many years of working toward understanding lie ahead.

Now let me go into some detail and discuss each of my five ideals or goals of management's responsibilities:

To me the first responsibility of management to its employees is to operate a successful business—a business which makes a profit. I mean a regular, healthy profit—the kind that continues to pay wages and expand a business, thereby making new jobs. It is unfortunate that through the past several years a great many influential people have considered profits as something to be ashamed of and avoided. Never were people more mistaken and misled. Profits are the lifeblood of a business and of the continuing progress of the individuals in the business.

There could be no business expansion, no industrial progress without profits. As for real benefits to employees, just try to find them in a firm which makes no profits. If the condition persists, the "going" business becomes the "gone" business with no jobs.

Employees should realize that, along with profits, the continued financial strength of a company is a management responsibility to them. This is particularly important in this period of very high raw material costs, high costs of finished products and high level of employment. Good busi-

*A talk before the Alumni Conference Harvard Business School, Cambridge, Mass. June 12, 1948

ness makes a lot of people say to themselves as they did in the late 1920's, "This is a new type, never-ending era of prosperity." They go head over heels in debt to build more plant capacity and promote their products to the limit. They haven't thought this business condition through to its logical conclusion. It is all right to borrow money for business needs, it is all right to promote your products; but you had better be dead sure, as sure as a man can be, that the business' financial future is not being jeopardized by over-expansion. One must not forget that no matter how long a dry season lasts, it finally ends in rain.

MY second point as to the responsibility of management is probably the most important one I have to make, other than that of profits. It is a point that is much harder to get across to management, and I know, for I have been talking on this subject now for almost twenty years. I refer to a guarantee to the employee of work for a specified number of weeks per year, wherever possible. Our Plan of Guaranteed Employment, which assures eligible employees at least forty-eight weeks work a year, has been in continuous operation since 1923. Other types of industries have come forward with other plans of stabilized employment, and these plans work.

You will say that stabilized employment is all right for businesses making soap and shortening, or shoes, or processing meats. Well let me tell you of our experience with an industry which was so seasonal that no one believed it could possibly be stabilized.

In this branch of our business, the crushing of cottonseed, we had a most serious problem because the amount of our available crushing material is governed entirely by the size of the cotton crop. Ever since cottonseed has been produced for industrial purposes, it has been brought in from the farms to the cottonseed crushing mills, crushed and the oil moved out during five or six fall and winter months. For this reason, the crushing mills were shut down for six months or so each year, and, of course, the employees were laid off. When we realized that the consumption of products made from that oil—shortening, for instance—went on regularly month after month with slight variations throughout the year, we felt that here, too, something could be done to regulate production to the consumption line. The answer was found in different storage and handling of the seed. Today, our 16 crushing mills in the South run from 10 to 12 months, with a consequent saving in investment for factory capacity per ton of seed and, what is even more surprising, an improved yield and quality of the oil produced from the seed. The steady employment, of course, results in keeping trained men on the job instead of having to train a new crew of men every crop season.

I am not going into further details here but anyone who has given steady, guaranteed employment a fair trial knows its many advantages to the employee and to the company. He's not going back to the old way of up-and-down employment.

With the steady job, should come a fair and reasonable wage. The matter of a fair day's pay may be a hard one to define. We have worked it out this way in our business. With our employee representatives we agree upon a list of the better companies in the communities in which we operate plants. Then, through the cooperation of these chosen companies, we obtain and tabulate their basic wage rates for given classifications of jobs. The employee representatives have full access to the figures used in the final calculations. From these calculations we arrive at what we believe is a fair hourly rate for a given job in a given community. The employees know this plan is sensible and fair and it works.

The first responsibility of management to its employees is to make a regular healthy profit, — insuring steady work, dependable wages and creating new jobs.

MY third point is management's responsibility to give the indiviidual employee a chance to develop the best that is in him. This may sound like a platitude. It is not.

Select a man carefully for the job he is going to fill. Give him proper training and supervision. Then give that man a real chance to prove his ability, to earn more money, through a wage incentive plan that pays him for more work produced above the average.

If the worker is confident he will be paid according to his ability to produce, you help him and help his production. As he sees himself doing a better job, he gains pride in his work and confidence in himself. The conditions in his home tend to reflect his increased earnings and you have a much better employee and citizen. Self-respecting employees make the kind of American who are active and eager to serve in their communties.

Naturally such a plan should include a procedure of promotion understood by all. The man who progresses should know where his progress will lead him. Most successful businesses have these plans and have laid down definite procedures. In some, however, promotion is rather higgledy-piggledy, and employees are likely to feel they haven't a fair chance at the better jobs.

The fourth responsibility of management is that every employee should be helped and given the chance to become a capitalist. This can be done in many ways and is being done in this country through profit-sharing, stock ownership, savings and other plans. Some of you may feel this objective—that as many employees as possible shall become capitalists — is dreaming. But again I want you to

know it has been worked out in our company and many others.

Let's see how it works. The employee, with the help of the company, begins to accumulate capital through stock ownership or a savings plan. He has a bank account; he has financial interest in the company. Pretty soon he is a home owner, and his children are well cared for. That man is a good employee and when you multiply him by hundreds or thousands, the chance of experiencing trouble in a plant with such employees is greatly lessened. Workers who own their own homes, have bank accounts and own stock in their company are the kind of capitalists any community can be proud of.

The fifth responsibility of management is for proper working conditions. There are a lot of factors to consider under this heading. There is the health of the employee, his safety while at work, and other general things such as recreation facilities, the workday atmosphere of the plant, and the attitude of the other workers. In the military services they call it "esprit de corps."

The subject of working conditions is one which tests the mettle of management and employees and their ability to get together, to resolve difficulties. There are a hundred and one problems which come up constantly in a plant—problems that require understanding and proper clarification. Right here let me say that a good decision on working conditions, one good for employees and good for the company, if not properly explained and made clear to employees may lose all of its value and may even cause trouble in the plant. Communications between management and employees are of the utmost importance. We go to great lengths to make clear the reasons for certain decisions and make sure these decisions are understood by employees.

I could dwell on this subject but anyone who has done no more than visit industrial plants can tell how important working conditions can be in affecting the employees' state of mind at work. Two plants side-by-side can be as different as day and night in the whole attitude of employees and also in the production records of their workers.

Results of Program

I REALIZE there are many other responsibilities of management but time does not permit my discussing them here. Management need not stop with the five; they can go on. However those covered, I feel, are the most important and the most pressing.

I think you will find the results of adopting such a program as apparent as they are valuable for those travelling down the long road to management responsibility. One of the obviously important results is often a greater output per worker, which is one of the main objectives of any producing company. This increased production leads to a lowered cost of goods which I think inevitably means more profits to the company and more benefits to employees. Increased production is the only way I know of to improve the standards of living of our people as a whole and, to my mind, this is a broad responsibility of management to the country at large.

Most important of all, improved working and living conditions for the people of our country represent the strongest possible insurance of the continuance of a free man society and our way of life, which has proved its superiority over any other known to mankind.

If management could and would follow through on the five objectives outlined here I would not worry about any of the "isms" developing in our midst, or outside our country. A man's job, his attitude toward it, and toward the people who work with him is the core and root of his American citizenship.

First Quarter Soap Fat, Oil Use Declines

ALTHOUGH reported consumption of primary animal and vegetable fats and oils for soap during the first quarter of 1948 declined as compared with the previous quarter, the rate was greater during the first three months of this year than during the corresponding period in 1947, according to figures released during June by the Bureau of the Census of the U. S. Department of Commerce.

Figures given by the Bureau show 570,263,000 pounds of fats and oils reported consumed for use in soap during the first quarter of 1948, as against 526,449,000 pounds for the comparable period in the previous year. In the final quarter of 1947, the largest of the year, 610,442,000 pounds were reported used for soap.

Coconut oil, tallow and grease continued to be the principal oils and fats used in soap making, the amount of coconut increasing over first and fourth quarters, 1947; grease use showed a similar advance, while inedible tallow consumption was below the first and fourth quarters of 1947. Changes in consumption rate of other moderately important oils (those in the million pound or over class) occurred in the cases of fish oil, whose use fell four million pounds in the first quarter and castor oil, which rose slightly, as compared with the final three months of 1947.

In the first quarter of 1948, 270,927,000 pounds of inedible tallow were reported used for soap, the largest single soap fat. Grease use was reported as 130,396,000 pounds and coconut oil, (crude and refined) amounted to 146,317,000 pounds. Total castor oil consumption was reported as 3,433,000 pounds during the first quarter and fish oil consumption was set at 14,803,000 pounds.

The only other oil in the million pound or over category for the quarter was babassu, of which 861,000 pounds of the crude and 794,000 pounds of the refined product were reported consumed for soap, making the total for the quarter of both oils 1,655,000 pounds, about one million pounds under the first and fourth quarter figures for 1947.

Total soybean volume for the quarter was 873,000 pounds, which was slightly above the fourth quarter figure and about half of the amount reported consumed in the first quarter of a year ago.

FISH OILS

By John R. Skeen
Market Research Department
Foster D. Snell, Inc.

FISH oils contributed over eight percent of all fats and oils consumed in soap before the war. For the past six years, this share was reduced to 2.7 percent. As use in the soap industry is determined by the availability of the supply as well as the price in relation to other slow-lathering, hard oils, the future of fish oils is conjectural.

Fish and whale oils are generally hydrogenated to a tallow-like consistency before conversion to soap and these three are closely, although variously, competitive. However, the fish oils are the "poor relations." When they have been hardened to the point where odor is eliminated, the resulting soap product is less soluble than one deriving from tallow. In addition, the non-fat content is significantly higher than common to whale oil. While important to soap-making, the fish oils have not enjoyed a favorable competitive position.

The group consists of menhaden, pilchard, sardine and herring oils, and only the last is imported in significant amount. Before 1941, over half was consumed in soap. On March 31, 1943, War Food Order 42 forbade use of herring, pilchard and sardine oils in the manufacture of soap. Almost exclusively of this group, menhaden oil represented the contribution to soap until the order was amended on March 31, 1945, permitting free use of the others. The amount consumed in soap increased immediately, but the supply dropped due mostly to the scarcity of pilchard oil from California. This source contributed 136 million pounds in 1944, 89 million the year after, and only 33 million in 1945. The catch was low again last year. Other fish oils carried the burden and imports became a significant factor. Last year, the menhaden catch was also abnormally small. As the present fishing season has only just started, it is too soon to estimate

(Turn to Page 153)

FISH OILS [1]

	Domestic Supply — 1000 Pounds					Consumption — % [2]		Soap Share	Price — c per pound [3]		
	Disappearance [4]	Factory Prod [5]	Imports [6]	Exports [6]	Stocks, Year End [5]	Soap [7]	Coatings [8]	% of Fats & Oils [9]	Menhaden	Sardine	Herring
1935	232,777	228,641	1,225	3,276	164,216	52.6	8.8	7.7	4.0	4.6	4.1
6	269,659	266,836	1,303	2,154	160,542	51.6	9.3	8.4	4.3	4.5	4.1
7	249,966	196,583	1,252	1,949	106,462	54.1	11.9	7.8	5.2	6.0	—
8	146,465	188,309	531	2,677	146,160	52.1	10.2	5.0	4.4	4.7	—
9	219,790	241,950	960	2,279	167,001	51.7	11.2	14.3	4.0	4.1	—
40	197,422	166.311	718	4.149	132,459	49.4	17.1	4.9	4.2	4.9	—
1	202,952	217,617	4,922 [10]	2,601	149,445	37.1	21.7	3.1	6.8	7.4	—
1942	160,152	153,565	8,817	8,165	143,510	32.0	15.3	1.2	8.8	8.8	8.9
3	164,603	191,697	17,457	12,743	135,318	28.4	16.0	2.4	8.8	8.9	8.9
4	181,863	204,473	16,933	9,093	165,768	26.8	19.9	2.4	8.8	8.9	8.9
5	252,263	172.160	17,938	16,932	86,671	42.1	15.8	5.9	8.9	8.9	8.9
6	133,018	144,976	5,810	4,342	100,097	26.0	23.7	2.4	11.1	11.6	—
7	143.898	108,503	3,100 [11]	10,930	56,872	24.3	19.6	1.8	18.5 [12]	19.9	—
8											
1Q	21,709	1,649	5,300	2,700	39,412	m. a.	m. a.	m. a.	20.9 [13]	22.0	—

1 Menhaden, herring, sardine, pilchard.
2 % of total factory consumption.
3 As quoted from Department of Agricultural; all crude, tanks; manhadne, Baltimore; Sardine and herring oils, Pacific Coast.
4 Apparent disappearance: factory production imports less exports plus change in stocks.
5 1934-38: *Animal & Vegetable Oils*, Department of Commerce, 1939; 1939-43, ibid, 1944; 1944-46, *Facts for Industry*, series M17-7-06; 1947-, ibid, series M17-1.
6 1934-46: see 4; 1947, *Fats & Oils, Annual Review*, Department of Commerce; 1948, *The Fats & Oils Situation*, Department of Agriculture May 1948.
7 Cited fish oils consumed in domestic soap expressed as per cent of total factory consumption of fish oils; 1934-46: see 4; 1947, *Facts for Industry*, series M17-2.
8 As 6 except consumption relates to coatings, i. e. paints and varnish.
9 Cited fish oils consumed in soap expressed as per cent of total fats and oils consumed in soap (xclusive of non-soap products); for basic data, see *The Fats & Oils Situation*, June 1947; 1947, an approximation based upon *Facts for Industry*, series M17-2.
10 Tariff Commission
11 Preliminary, herring only.
12 9-month average, not quoted for 3 months.
13 January only, not quoted February and March.

Mrs. Consumer asked for an easy-pouring container . . .

WE PRODUCED THE Shelfline!

a new line of Duraglas containers

"Shelfline" containers have a new style shoulder structure that acts as a funnel—guarantees convenient, easy pouring! Surveys reveal this is a packaging feature Mrs. Consumer prizes!

Months of intensive research, designing and engineering have produced this new "Shelfline." It was made-to-order—your orders and your customers'!

Here are some other container advantages that consumers prefer and packers demand . . . advantages that the new "Shelfline" offers:

1. **Balanced, space-saving proportions . . . stable base . . . won't roll on counter, table or shelves.**
2. *** Easy-to-grip . . . easy-to-open and recap!**
3. **Wide front and back panels for maximum label display . . . as well as adequate space for side labeling if desired.**
4. **** Twelve sizes: ½ oz., ¾ oz., 1 oz., 2 oz., 3 oz., 4 oz., 5 oz., 6 oz., 8 oz., 12 oz., 16 oz., 32 oz.!**
5. **Only *four* cap sizes required for *all twelve* sizes of the narrow-neck line.**
6. **Three colors: amber, flint and emerald green to fit every need.**

You will find this new "Shelfline" adaptable to high-speed automatic filling and labeling equipment. It can replace many of your present containers, simplifying and securing family identity throughout entire lines. Call on us—we can fill your needs NOW.

*** Oblong shape fits securely in hand—is easy to grasp even when hands are wet.**

**** The "Shelfline" is a *complete* line—12 sizes, 3 colors . . . 36 containers to choose from.**

Duraglas CONTAINERS—PROTECTORS OF QUALITY

OWENS-ILLINOIS GLASS COMPANY • TOLEDO 1, OHIO • BRANCHES IN PRINCIPAL CITIES

TRADE NEWS. . . .

Finish L.A. Soap Plant

The new factory building being erected at 617 E. First St., Los Angeles, by Los Angeles Soap Co., as part of its expansion program, will be completed shortly. It is a five-story and basement, steel and concrete structure adjacent to the company's present plant which runs between E. First and Bannin Sts. The new building is to be 50 x 115 feet in area and will provide 5,750 square feet of floor space on each floor, including the basement. Stiles Clements architect, designed the building, which is being erected by Schuck Construction Co.

Ask Soap Sales Changes

An end to direct selling of soap products or discontinuance of present floor stock protection policies was asked of soap companies at the 49th annual convention of the National Association of Retail Grocers meeting in Atlantic City, N. J., during June. The present policy of protecting warehouse stocks against price declines works a hardship on the retailer who buys direct while protecting those who warehouse their merchandise, it was pointed out in a panel discussion. Representatives of retailers, wholesalers and manufacturers made the suggestion regarding soap sales policy changes during the discussion, in which an effort was made to work out a plan that would afford equal protection to all retailers.

Markets New Hand Soap

"Luron," a new hand soap in powdered form is now being marketed by Pacific Coast Borax Co., Los Angeles. The product is stated to be formulated with lanolin.

Davis Labs. Move

Davis Laboratories, Chicago manufacturers of perfuming materials recently moved to 716 W. Madison St., Chicago 6.

Bower Ayer Sales Mfr.

Maxwell Bower, formerly of Industrial Tape Corp., has been named general sales manager of Harriet Hubbard Ayer, New York, associate company of Lever Brothers Co., Cambridge, Mass., it was announced late in June by Ralph P. Lewis, Ayer president. At one time Mr. Bower had been associated for 10 years with Milkmaid, Inc., (Lorr Laboratories) as vice-president in charge of sales.

MAXWELL BOWER

Shell Detergent Plant

Construction of the first unit of a projected plant for making oil-derived synthetic detergents was begun recently at Wood River, Ill., by Shell Chemical Corp., San Francisco. Raw materials from a nearby refinery of the company will be processed at the plant. The unit now being built will be used to produce an intermediate for the production of finished detergents.

New Industrial Hand Soap

A new industrial hand soap known as "4-in-1 All White Skin Cleanser" was introduced recently by Kent Chemical Co., Grand Rapids, Mich. Extreme bulkiness and the absence of harsh abrasives are said to characterize the new product.

Luckman on Production

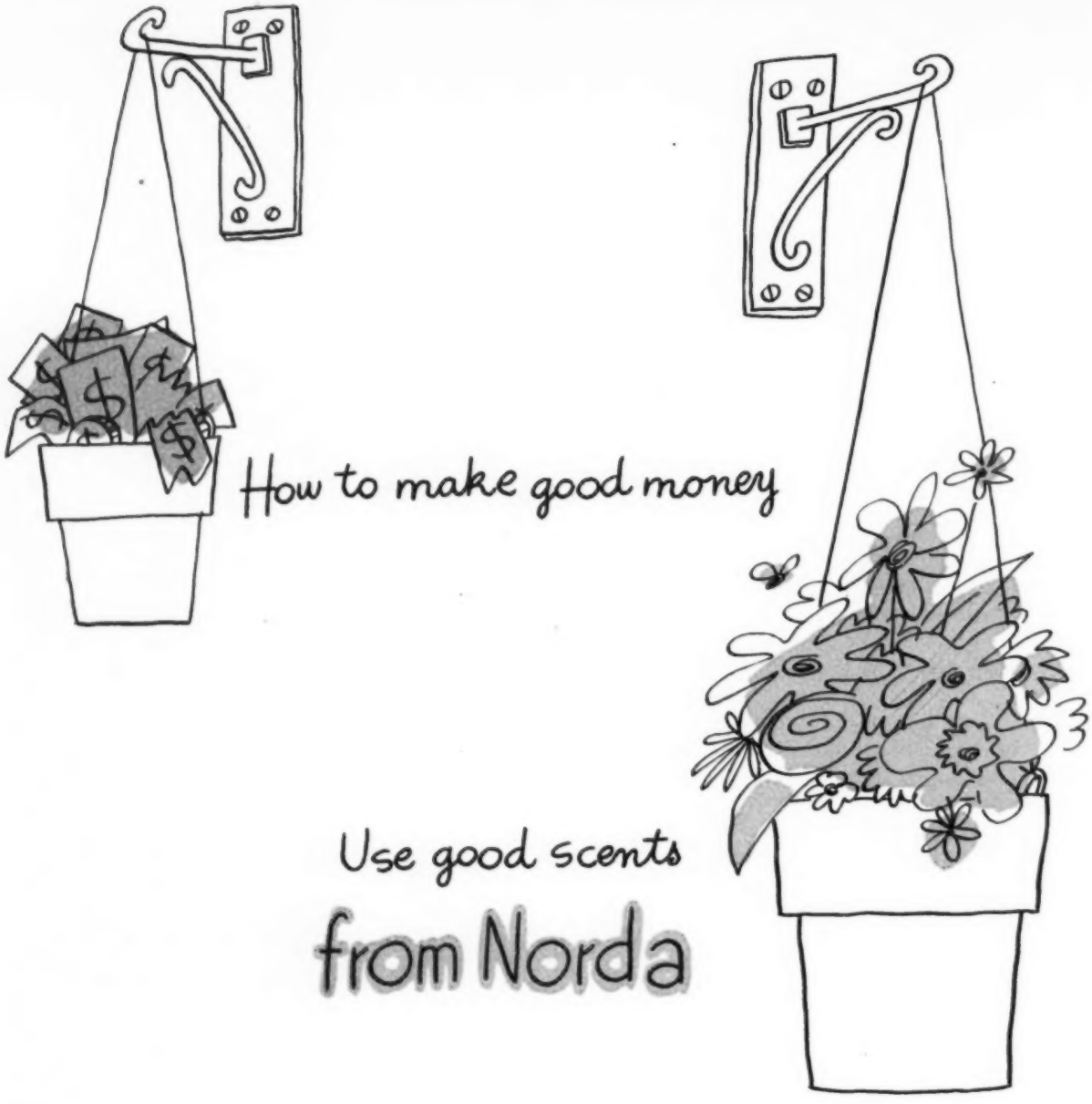
Charles Luckman, president of Lever Brothers Co., Cambridge, Mass., speaking before the 25th annual management conference of the American Management Association at the Waldorf-Astoria Hotel, New York, June 9, declared American industry must increase productivity at once with present plant and manpower facilities to meet defense requirements, to beat inflation and to aid Europe. The title of Mr. Luckman's address was, "Where Freedom Begins." By increasing production 10 percent with present facilities inflation can be beaten and more goods at lower prices can be turned out, Mr. Luckman stated. He proposed the establishment of a "Joint Productivity Clinic" composed of representatives of management and labor to work out methods to increase production. Lever Brothers Co. will pay the cost of such a clinic for the first year, Mr. Luckman said.

Palestine Soaper in U. S.

S. Sherf of Lactolive Co., Tel Aviv, Palestine manufacturers of toilet soaps, arrived in the United States early in June for a three months visit. He is seeking to purchase soap making and other equipment, as well as to contact sources of supply for raw materials. His company produces "Lactolive" toilet soap, a soap designed to sell in the higher price range.

Lever Appoints Lee

The Pepsodent Division of Lever Brothers Co., Cambridge, Mass., recently engaged Raymond Lee, as special consultant in the development and marketing of "Rayve Shampoo" and "Hedy Home Permanent Wave." Mr. Lee, former president of Raymond Laboratories, more recently was vice-president of William R. Warner Co., New York, from which firm Lever Brothers acquired "Rayve" and "Hedy Home Permanent Wave" in May.



Basically, you sell a smell. Good sales depend on good scents.

New customers come to Norda with old problems and new products every day. They know we will give them good scents. Some of the suggestions we have worked out with them have helped start great sales successes.

Put it up to us to help *you*. Give us a perfume puzzle . . . the job of creating a new lipstick fragrance, for instance . . . or a new soap odor for you. Norda men like to tackle your worries.

Send today for free samples of Norda odors and essences, so you can tell from the smell how good they are. Get yours now, without obligation.

Norda **Essential Oil and Chemical Company, Inc.**

601 West 26th Street, New York 1, N. Y.

CHICAGO • LOS ANGELES • ST. PAUL • MONTREAL • TORONTO • HAVANA • MEXICO CITY • LONDON

Convicted in Soap Theft

Fines totaling $4,000 and jail sentences were given five men convicted in New York of having stolen and resold 500 cases of government owned soap during the shortage in 1946. The stolen soap was earmarked for shipment abroad. The five were charged with having diverted one truckload of a 10,000,000 pounds purchase by the U. S. Department of Agriculture for UNRRA. The soap eventually appeared in New England stores during the height of the soap shortage and gave rise to the suspicion that it was stolen.

Introduces Soap Book

Bur-Mon-Hath Products, 130 Cooper St., Jackson, Mich., has announced a novelty soap product in the form of a book, each of whose ten pages is impregnated with soap. When immersed in water, according to illustrated directions on the back cover, one page will create enough lather for washing both hands. The book, 2 ½ by 3 ½ inches in size, can be carried in pocket or purse and is intended as a utility advertising medium.

P. & G. Honors Old Employes

During 1948 over 150 employees of Procter & Gamble Co. will be awarded 25-year diamond studded service emblems, it was recently announced. Another 70 will mark 30 years of service with the company during the year, while numerals on many emblems will be changed to 35, 40, 45 and even 50 years. Altogether some 600 P. & G. employees are wearing service emblems indicating 25 years or more with the company.

New Huntington Library

Huntington Laboratories, Inc., Huntington, Ind., have recently completed a new fully-equipped technical library in connection with their plant and offices at Huntington, according to J. L. Brenn, president of the company. In addition to the new library, three new specially equipped laboratories have been added to the research and testing facilities of the firm, as well as a new supply room recently completed.

Rudolph Heads D. & O.

Joseph F. Rudolph has just been elected president of Dodge & Olcott, Inc., wholly owned subsidiary of U. S.

JOSEPH S. RUDOLPH

Industrial Chemicals, Inc., New York, to succeed Charles A. Myers, who is retiring. Mr. Rudolph has been associated with U. S. I. for 34 years, and has been manager of the Chicago sales division of the corporation since June, 1936. He had served with the firm in Detroit, Philadelphia and New York, prior to his appointment to head the Chicago office.

At the same time it was announced, Valentine H. Fischer, Charles O. Homan and J. Waldo Booth remain as vice-presidents. Fred H. Kirn continues as treasurer.

George H. Stanton, who has served as assistant division manager in Chicago since 1943, has been appointed to succeed Mr. Rudolph as Chicago division manager. Mr. Stanton has been with the firm since 1932, when he was graduated from Syracuse University. He joined the sales staff of the Chicago office in 1938, after serving as manager of USI's Twin Cities' office for two years.

William Tuerck Is Dead

William Tuerck 60, sales manager for Latin America for Schimmel & Co., New York died June 18, in New York Hospital after a brief illness. He made his last trip to Latin America only a few weeks ago. In addition to his widow, he leaves two sons and a daughter.

"Lifebuoy" is 50

A special advertising and promotion campaign is now underway on behalf of "Lifebuoy" soap, Lever's oldest brand, now celebrating its 50th anniversary. Radio and newspaper advertising as well as point of purchase material will be used in the campaign for the soap, which was first made in Cambridge, Mass., 50 years ago. From an initial batch of 50 cakes over four and one-half billion cakes have been sold up to the present. "Lifebuoy" now appears in a new package designed by Raymond Loewy. The hot weather months are the soap's best selling period.

Tests conducted by Killian Research Laboratories, Inc., New York, are being used in advertising and promotion material for statements regarding the soap's cleaning ability.

Send Soap to Germany

School children of Bremen, Ind., recently presented almost half a ton of soap to the school children of Bremen, Germany. The Indiana town was settled by emigrants from its German namesake and the school children here became interested when their former principal, now with the military government in the German city, wrote that children in Bremen, Germany, were without soap.

King Knights Heyworth

Geoffrey Heyworth, chairman of Lever Brothers Unilever, Ltd., Cheshire, England, recently was made a knight by King George VI. He was one of a list of prominent Britons receiving decorations to mark the official birthday of the King on June 10.

Chem. Salesmens' Outings

The July golf outing of the Salemen's Association of the American Chemical Industry, was to have been held Thursday, July 22nd at Knoll Golf Club, Boonton Manor, N. J. In August, the CSA will play at Pomonok Golf Club, Flushing, N.Y., on Wednesday the 18th.

The June 15 outing was held at Bonnie Briar Country Club, Larchmont, N. Y.

New Kamen Detergent

Kamen Soap Products Co., New York, recently introduced "Kamenol D", an alkyl aryl sulfonate synthetic detergent in white bead and slurry form. A mechanical dishwashing compound, "Kamen, 236," single pressed stearic acid and saponified red oil are now available from the company.

Joins Rumford Chemical

Dr. Norman Oscar Stein, formerly general superintendent of the carbon dioxide plants of Air Reduction Sales Co., New York, and wartime manager of the chemical section, War Assets Corp. of Canada, was recently appointed chief technical assistant to the president of Rumford Chemical Works, Rumford, R. I.

Gimbel Detergent Sale

Gimbel Brothers Co., New York department store, recently advertised a 50 percent per case reduction in the price of a quantity of synthetic detergent that it obtained at reduced prices because it was feared the color of the package in which the manufacturer had put up the product would injure its sale in the area in which it was distributed. The detergent, reported to be "Trend," made by Purex Corp., Ltd., South Gate, Calif., sold for 19 cents in 8¾ ounce packages; $2.04 per half case of 12 packages and $3.60 for the case.

Elect Florasynth Man

Louis F. Haznaw, a chemist in the Chicago laboratories of Florasynth Laboratories, Inc., New York, was recently elected president of the Lions Club of Westmont, Ill. Long interested in civic affairs and a Lion of long standing, Mr. Haznaw was installed with appropriate ceremonies at the Downers Grove (Ill.) Lions Club, June 28.

Hasterlik Joins Sergeant

Robert M. Hasterlik, formerly connected with the sales departments of Prior Chemical Corp. and General Chemical Div., Allied Chemical & Dye Corp., New York has recently joined the sales force of E. M. Sergeant Pulp & Chemical Co., New York.

DCAT Hears Dr. Scheele

Dr. Leonard A. Scheele, Surgeon General of the U.S. Public Health Service was the guest of honor at the

DR. LEONARD A. SCHEELE

June 30 luncheon meeting of the Drug, Chemical and Allied Trades Section of the New York Board of Trade, held at the Hotel Astor, New York. Dr. Scheele spoke on "Industry's Contribution to Public Health."

Lukens is 138 Years Old

Lukens Steel Co., Coatesville, Pa., operators of the world's largest and most modern sodium hydride descaling facilities, celebrated its 138th anniversary of continuous operation July 2. Three descendants of the founding family are still active in the business, including Charles Lukens Huston, first vice-president, who celebrated his 92nd birthday July 8. Mr. Huston has been with the firm since 1875. His son, Charles Lukens Huston, Jr., serves as vice-president and executive assistant to the president and Stewart Huston, third member of the firm who is a descendant of the founder, is secretary.

The company recently issued a 28-page, two-color, illustrated booklet entitled "A Visit to Lukens," given as a souvenir to visitors at the plant.

New Hough Name

Central Solvents & Chemicals Co. is the new name adopted last month by William J. Hough Co., Chicago to more accurately describe the nature of the company's activities.

TGA Section to Meet

The Toilet Goods Association, New York, recently announced that the next meeting of its Scientific Section will be held at the Waldorf-Astoria, New York, Dec. 9, 1948. The Association is soliciting papers for the meeting.

More Peanuts for Africa

Another British peanut growing project, for west Africa, even larger than the program now under way in East Africa, is proposed in a recent report of the British West African Oil Seeds Mission. The report recommends the development of 5,000,000 acres in Nigeria, the Gold Coast and Gambia as peanut plantations, at a cost estimated at $100,000,000.

Receives Honorary Degree

Edward J. Lowy, president of Kem Laboratories, New York, was awarded an honorary degree of Doctor of Science at the 127th commencement exercises of Pennsylvania Military College, Chester, Pa., June 1. The award was conferred by the institution's board of trustees for research accomplishments in the field of chemistry and "general humanitarian service to the community" particularly during the recent war. Mr. Lowy is responsible for the development of several stain removers. His firm specializes in the manufacture of boiler compounds for laundry and textile industries.

Florasynth Advances Two

Two executive advancements were announced late in June by Florasynth Laboratories, Inc., New York. Merrit V. Eusey of Los Angeles, formerly manager of the Southern California area, is now divisional manager for the Pacific Coast and the Hawaiian Islands. The other West Coast change concerns Dennet Withington, who has been designated president of California Chemical Corp., an affiliate of Florasynth Laboratories in San Bernardino, Calif. Mr. Withington, an attorney, for many years has represented Florasynth on the West Coast as counsel, in which capacity he will continue to function in addition to his new duties.

RALPH M. STEVENSON

J. H. R. STEPHENSON

Givaudan Changes

The enlargement of its sales management staff and the construction of a new building at its plant at Delawanna, N. J., were announced during June by Givaudan-Delawanna, Inc., New York. The appointment of J. H. R. Stephenson, formerly of Aromatic Products, Inc., New York, and Colgate-Palmolive-Peet Co., Jersey City, N. J., as eastern sales manager, effective Oct. 1, and the naming of Ralph M. Stevenson as Midwestern sales manager with headquarters in Detroit, were reported. Mr. Stevenson will remain a director of the company and will continue to to be actively connected with the management.

A new two-story, steel and concrete building having approximately 45,000 square feet of floor space which was begun recently, will mainly house the increased and modernized facilities of the perfume specialty department, and will also provide for the packaging and shipment of all Givaudan products.

A.O.C.S. Meets Nov. 15-17

The American Oil Chemists Society will hold its annual meeting at the Hotel Pennsylvania, New York, November 15-17. Foster D. Snell of Foster D. Snell, Inc., New York, is general chairman of the convention committee, with H. W. Vahlteich of Best Foods, program chairman. The program for the meeting of the soap section, which will be held November 15, is being organized by W. A. Peterson of Colgate-Palmolive-Peet Co., Jersey City. Papers to be delivered before the meeting must be in the hands of the committee for checking purposes by August 1.

Printers' Hand Cleaner

A new hand cleaning compound, designed particularly for removing printing ink, grease and glue from the hands, was announced recently by Premier Chemical Co., Rochester, N. Y. The product, "Glisn" is applied by placing a few drops in the palm of the hand and massaging well into the skin until liquified and the ink is loosened. It is then wiped off with a paper towel. The product is said to contain emollients and no solvents.

Polak & Schwarz Conf.

A conference of American and British executives of Polak & Schwarz, Inc., New York, was held at the company's Chicago branch, June 15. Louis Davids, executive vice-president who was returning from California, K. Bohemen and S. R. Mansfield, directors of Polak & Schwarz (England) Ltd., Enfield, England, who represented the British company at the International Fair in Toronto, and George W. Liddell, general manager of the midwestern division of Polak & Schwarz were present.

N. Y. School Soap Buying

A recommendation that $75,000 be spent to provide liquid soap and paper towels for elementary school children in New York City was made recently by a committee on handwashing and drying of the Board of Education after a six month study of the most effective way to spend the $100,000 appropriated by the city for the purpose. The remaining $25,000 is to be spent for dryers, soap and towels in an experiment in junior and senior high schools aimed at determining the cheapest way to provide soap and drying facilities. The Board of Education originally asked for an appropriation of $640,000 in the city budget for soap and towels. The figure of $100,000 finally approved by the Board of Estimate in the budget is the first specific appropriation for soap and towels in the history of the city. The handwashing committee reported that a gallon of liquid soap can provide for 2,200 handwashings.

BIMS Open Golf Season

The New York BIMS held their first golf outing of the 1948 season at the Baltusrol Golf Club, Springfield, N. J., Tuesday afternoon, June 22nd, and the unquenchable enthusiasm of the BIMS membership was never better illustrated. In spite of day-long rain and fog, some 70 members and guests completed golf rounds, while others showed better sense by staying in the clubhouse for a series of bridge and "gin" engagements.

Arrangements as usual were in the capable hands of Martin Schultes of Hewitt Soap Co., assisted by Pete Forsman of C. H. Forsman & Co. Following a fine roast beef dinner, prizes were awarded in the BIMS celebrated casual and haphazard manner to a series of golfers and others participating in the activities.

Joins Windsor House

Robert H. Seltzer, formerly connected with Bristol-Myers Co., New York, has recently been appointed general sales manager of Windsor House, Ltd., New York manufacturers of men's toiletries.

Fatty Acids? Hardesty of course!

Every day it becomes more *a matter of course* to phone Hardesty for fatty acid requirements. Manufacturers of a diversified list of products have the Hardesty Habit . . . a habit which has formed because of Hardesty's habit of providing quality chemicals—*when* you want them, *how* you want them.

Some habits—the shoe you put on first in the morning, the way you button your coat—are meaningless, but the Hardesty Habit means quick deliveries *and* uniformity of products.

Where it's a matter of assured shipments of quality fatty acids, it's a matter of course to contact Hardesty. Of course . . . it's the W. C. Hardesty Company, 41 East 42nd Street, New York 17. At the other end of your telephone wire: Murray Hill 2-1920.

RED OIL • GLYCERINE • STEARIC ACID • WHITE OLEINE • STEARINE PITCH • HYDROGENATED FATTY ACIDS • ANIMAL AND VEGETABLE DISTILLED FATTY ACIDS.

HARDESTY PRODUCTS ARE INDUSTRY'S KEYSTONE

W. C. Hardesty Company

41 EAST 42nd ST., NEW YORK 17

FACTORIES: DOVER, OHIO
LOS ANGELES, CALIF. • TORONTO, CAN.

General Drug Changes

Sale of the aromatic chemicals inventory, other than vanillin and related products of General Drug Co., Brooklyn, to Verona Chemical Co., Newark, N. J., the election of P. Val Kolb as vice-president of General Drug Co. to succeed C. K. Wellenkamp, who joins Verona, and the discontinuing of General's Brooklyn offices took place during June. The new vice-president of General Drug, which is a subsidiary of Sterling Drug, Inc., New York, retains his post as vice-president of another Sterling subsidiary, Winthrop-Stearns, Inc., in charge of its markets-industrial division.

Mr. Wellenkamp, formerly in charge of the aromatics division and vice-president of General Drug, had been with the company for 20 years.

Offices of General Drug have been moved from Brooklyn to 170 Varick St., New York.

P. & G. at Nurse Convention

Procter & Gamble Co., Cincinnati, O., occupied a booth at the national joint convention of several professional nursing groups in Chicago last month, where visitors were offered the first four of a series of time-saving leaflet pads for doctors. Titles were "Instructions for the Routine Care of Acne," "Instructions for Bathing a Patient in Bed," "Instructions For Bathing Your Baby," and "The Hygiene of Pregnancy."

Homemakers Products Corp., New York City, another exhibitor, featured "Diapene," a newly developed diaper-rinse and bactericide.

Set Up Consulting Labs

Central Consulting Laboratories, Brooklyn, was formed recently to do research on product investigation and development particularly in the drug and cosmetic industries. A. A. Marbardie, one-time technical director for Mary Chess, Inc., New York, and associated with other food, chemical and drug firms, is director of the new organization. Testing and research can be done in the chemical, biochemical, nutritional, physical, biological, bacteriological, toxicological, pharmacological and pathological fields.

On the occasion of his 30th anniversary as a trustee of the East River Savings Bank, New York, Percy C. Magus, president of Magnus, Mabee & Reynard, Inc., New York, was honored by a luncheon at the bank's headquarters. He is shown receiving the congratulations of Joseph A. Broderick, president of the bank.

Unilever Builds in India

Construction of two factories for the production of soap and hydrogenated oil products in Rahimyarkhan, Bahawalpur, India, was begun recently by Unilever (Commonwealth Holding), Ltd., England, Approximately 5,000 tons of soap yer year will be produced at the plants, which are scheduled to be in operation next year.

Phila. Quartz Moves

Philadelphia Quartz Co. will move its offices Aug. 4 to new quarters in the Public Ledger Building, Independence Square. The company has occupied its old quarters at 121 S. Third St. for nearly 50 years. July also marks the completion of the company's 117th year. Philadelphia Quartz Co. was founded by Joseph Elkinton as a soap and candle manufacturing firm on July 21, 1831. Early in the '60's the Elkintons produced silicate of soda for their own soaps, and soon after for other soap makers. The present company name was first used in 1864, when a new plant was built for producing silicate of soda. Soap and silicates continued to be manufactured until 1904, when silicates became the exclusive products of the company.

Names Marks Vice-President

Bernard L. Marks, for the past 25 years connected with the fine soap and cosmetic industry, was recently appointed vice-president and general manager of production and sales of Antoine de Paris, Inc., New York.

Hold Sanitation Clinic

The problems of garbage disposal and providing clean beer glasses were discussed at the first National Sanitation Clinic held during June at the University of Michigan, Ann Arbor. Dr. Ira Hiscock of Yale University was chairman of the meeting at which 400 attended. The clinic was held in the Michigan School of Public Health and was underwritten by the university and private industry. No improvement in the beer glass situation was foreseen unless mechanical dishwashers were installed, one speaker said. He added that tavern owners won't clean their glasses when they find themselves rushed. Unification of local, state and Federal sanitation laws was advocated by many of the delegates. Labeling of garbage cans with a skull and crossbones was recommended by an advertising executive as a means of dramatizing the menace to health from present garbage disposal methods.

Opens Chicago Offices

The Chemical Products Division of Atlantic Refining Co., Philadelphia, opened a Chicago sales office in the Chicago Title and Trust Building 111 W. Washington St., July 1. Max H. Reynolds, who has been with the company for 14 years, will be in charge of the office. Mr. Reynolds has been associated with the research and development department of the company, and spent the greater part of his time on the sale of specialties and chemicals.

KAMENOL D

Synthetic Detergent

Just recently one of the leading experts on synthetic detergents tested and tabulated over 500 detergent compounds. His findings warranted the listing "EXCELLENT DETERGENCY" for our KAMENOL D.

What is Kamenol D?

It is a "soapless" soap for hard or soft water . . . in white bead or slurry paste form . . . good in salt solutions.

What Can Kamenol D Do?

Mixes Well With Other Ingredients
Non-Caking
Free Flowing—Ideal for Filling Machines
Softens Water Promptly and Effectively
Dissolves Instantly
Perfectly Stable

How is Kamenol D Used?

By itself, or in compounding, it is a product which is easily and economically adaptable to many possible industrial and household uses. Several are suggested here:

Industrial Cleaners and Laundry Compounds
Household Cleaners, Dish and Bottle Washer
Cotton and Wool Washing Compounds
Textile Detergent and Rug Shampoos
Automobile Washers and Metal Cleaner
Wall, Floor and Ceiling Cleaners
Dairy Cleaner, Food Utensil and Machinery Cleaner
Wetting and Emulsifying Agent for Insecticides

What Are Kamenol D's Properties?

High Active Ingredients
Clear, Soluble in Hard or Soft Water—all proportions
Active in Extremely Low Concentrations
Non-Irritating to the Skin
Rich Foaming Suds
Excellent Dispersing Properties

also manufacturers of

Laundry and Industrial Soaps Dishwashing Compound
Crude Glycerine Saponified Red Oil
Fatty Acids Stearic Acid

KAMEN SOAPS

KAMEN SOAP PRODUCTS CO., INC.
OFFICE, WOOLWORTH BUILDING NEW YORK, N.Y.
FACTORY, BARBERTON, OHIO

Merit Medal to Knipling

Dr. Edward F. Knipling, in charge of the Division of Insects Affecting Man and Animals of the Bureau of Entomology and Plant Quarantine, U. S. Dept of Agriculture, Washington, D. C., was recently awarded the Medal of Merit by the Department of National Defense for outstanding service during the war. Dr. Knipling, as director of the Orlando station of Bureau of Entomology and Plant Quarantine during the war. was decorated for his work in investigating and developing insecticides and repellents for the prevention of insect borne diseases in the U. S. Army. The citation accompanying the award signed by President Truman, pointed out that "as a result of these studies the Armed Forces adopted the use of DDT for the control of insect-borne diseases and new uses and equipment were developed for dispersing of insecticides by new methods, including airplane spraying of infested areas."

Dr. Knipling was notified early this year that he was to be awarded Great Britain's highest decoration for civilians, the King's Medal for Service, for the part he carried on in relation to the same investigations.

The Medal of Merit, awarded only to civilians, is for the purpose of rewarding outstanding and meritorious conduct in the performance of duties in furtherance of the war efforts of the United Nations.

Edlund Joins Rudge Board

Roscoe C. Edlund, who resigned earlier this year after 21 years as manager of the Association of American Soap and Glycerine Producers, Inc., was recently appointed to the board of directors of Fred Rudge, Inc., New York management counselor on employee and community relations. For the present, Mr. Edlund is giving some of his time to the company as an executive at its headquarters at 475 Fifth Ave. The Rudge organization is three years old. It handles all phases of employee-employer relationships including public relations and advertising.

New Hudson Advt. Manager

R. O. Guether, formerly vice-president and director of copy for Evans Associates, Chicago advertising agency, was appointed a manager of the advertising department of H. D. Hudson Mfg. Co., Chicago, during June. Mr. Geuther for the past four years has prepared and written Hudson publication advertising and assisted the company on other advertising and sales promotion matters.

Danilek Heads Mary Chess

Joseph A. Danilek, formerly controller of Revlon Products Corp., New York, recently resigned that post to become president of Mary Chess, Inc., New York. Mr. Danilek, whose appointment becomes effective Aug. 1, has been secretary and a member of the board of directors of the Toilet Goods Association.

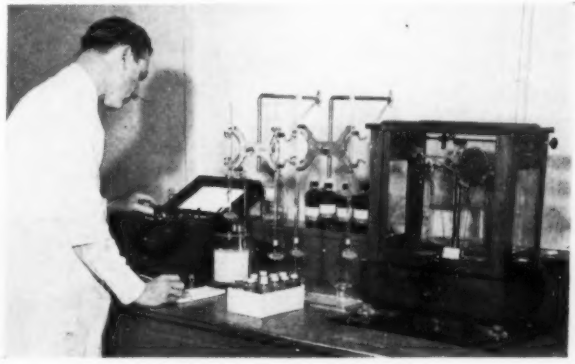
Oronite Chemical Moves

Oronite Chemical Co., San Francisco, recently moved to new and larger quarters at 38 Sansome St., San Francisco 4.

F.T.C. Floor Wax Hearing

A set of proposed trade practice rules for the floor wax products industry were submitted at a meeting in Washington June 29 between representatives of the Federal Trade Commission and representatives of the floor wax industry. Public hearings on the proposed rules will be held in New York on Sept. 9.

At the June 29th hearing, rules submitted by S. C. Johnson & Co., Racine, Wis., were in the main adopted. Changes made in the Johnson proposals were largely suggested by Boyle Midway Co., New York.



A chemist is performing a potentiometric titration test on a soap sample in the recently completed laboratories of Vestal, Inc., St. Louis. The new laboratories are composed of four units: bacteriological; physical testing, including analytical control of raw materials and production; research and development; and technical library.

PAINT BRUSH CLEANERS

(*From Page 36*)

16) Doring, P.: "Money-Saving Formulas,," Philadelphia, Blakiston, 1946, p. 230
17) Anon.: "Book of Formulas," Ed. 4, New York Grosset & Dunlap, 1935, pp. 188-9
18) Crowley, C. A.: "Money Making Formulas," Chicago, Pop. Mech. Press, 1939, pp. 94-5, 209
19) Forrester, G. P.: "Pharmaceutical Formulas," Vol. II, London Chemist & Druggist, 1934, p. 917
20) Bennett, H.: "Chemical Formulary," New York, Chem. Publ. Co., Vol. II-p. 67, Vol. IV-pp. 342-3
21) Hodgman, C. D. & Holmes, N. H.: Handbook of Chemistry and Physics," Ed. 26, Cleveland Rubber Publ. Co., 1942, p. 2391
22) Bennett, H.: "Chemical Specialties," New York, Chem. Publ. Co., 1946, p. 413
23) Anon.: "Dresinates," Wilmington, Hercules Powder Co., 1945, 5 pp.
24) Anon.: Chem. Proc. Preview, Jan. 1948, p. 48
25) Inman, W. A.: U.S. Pat. 2,354,319 1944

Stanco, Inc. Absorbed

The absorption of Stanco, Inc., New York, by another affiliate of Standard Oil Co. of New Jersey, will be completed in the next two or three months. The well-known Stanco insecticide, "Flit," will continue to be marketed, probably by the Standard affiliate, Enjay Co. The Stanco plant in Bayway, N. J., which has operated under the Stanco name for over 20 years, will probably become part of Esso Standard Oil Co., Bayway. Previously "Flit" was sold by Esso in states where Stanco didn't operate, and in states where Esso did not operate Stanco sold the product. The dissolution of Stanco is a part of a series of similar moves on the part of the corporation to reduce the number of affiliates.

Cowles Chemicals

DRYMET*

the economical detergent silicate

Write for **DRYMET*** **FILE FOLDER** containing complete technical information.

PROMPT SHIPMENTS — one package or a carload.

DRYMET is anhydrous sodium metasilicate. On the basis of both Na_2O (alkalinity) and SiO_2 (silicate) it is more economical to use than other types of hydrated or anhydrous detergent silicates.

DRYMET contains no water of crystallization. It is readily soluble in all practical concentrations at all practical temperatures. DRYMET has a total alkalinity as Na_2O of not less than 51%. It yields a pH of 11.95 in a 0.1% solution.

CRYSTAMET* — Cowles Sodium Metasilicate, pentahydrate, is also available for immediate shipment.

*Reg. U. S. Pat. Off.

The Cowles Detergent Company

HEAVY CHEMICALS DEPARTMENT

7012 EUCLID AVENUE • CLEVELAND 3, OHIO

BIDS AND AWARDS

P. O. Soap Bids

In a recent opening for miscellaneous supplies by the Post Office Department, Washington, D.C., the following bids were received on 180,000 pounds of toilet soap: Stahl Soap Corp., Long Island City, N. Y., item A, 18 cents a pound, item B, 19 cents; Swift & Co., Chicago, item A, 16.99 cents; Unity Sanitary Supply Co., New York, item A, 32 cents, item B, 36 cents.

In another Post Office Department opening for 33,120 pounds of soap powder these bids were received: Stevens Soap Corp., Brooklyn, 5 cents a pound; Unity Sanitary Supply Co., New York, 8.5 cents and 9 cents; Kamen Soap Products Co., New York, 9.8 cents and Swift & Co. Chicago, 5.2 cents;

Bids on 6,000 pounds of toilet soap in a similar opening by the U. S. Post Office Department, included those of Colgate-Palmolive-Peet Co., Jersey City, N.J., fob New York, 16.899 cents; fob Chicago, 18.636 cents, fob Atlanta, 18.836 cents; fob Kansas City, 18.613 cents; and fob San Francisco, 16.8 cents; Swift & Co., Chicago, fob E. Cambridge. Mass. or Chicago 16.99 cents; fob New York, 17.1 cents; fob Chicago, 17.1 cents; fob Kansas City, 17.8 cents and fob San Francisco, 18.5 cents; Stahl Soap Corp., Long Island City, N. Y., fob Glendale 18.5 cents and Pioneer Soap Co., San Francisco., 18.7 cents.

AQMC Detergent Bids

The following bids were received in a recent opening by the Army Quartermaster Corps., New York on liquid and powder detergent for mobile laundries: General Aniline & Film Corp., New York, 6,250 gallons of liquid types I and II, $1.18; Atlas Powder Co., Wilmington, Del., 6,250 gallons of liquid types I and II, $3.83; General Dyestuff Corp., New York, 53,125 pounds, liquid types I and II, 13.9 cents; 400,000 pounds of powder type III, 28.75 cents; Hood Chemical Co., Pittsburgh, 25,000 pounds powder type III, 10 cents; 641,683 pounds, 10.5 cents; 285,317 pounds, 10 cents, 100,000 pounds, 10.5 cents; Rohm & Haas Co., Philadelphia, ("Triton NE,") 6,250 gallon liquid types I and II, $1.30; (Triton A-30"), 6,250 gallons, $1.89; 30,000 pounds, $1.93.

Sweeping Compound Bids

In a recent opening for miscellaneous supplies by the Treasury Department, Bureau of Federal Supply, Washington, D.C., the following bids were received on 24,000 pounds of sweeping compound: Buffalo Sweeping Compound Co., Buffalo, N.Y., $2.30 cwt; Janitors' Supply House, Baltimore, 2.9 cents; Government Chemical Products Corp., Cleveland, 4.26 cents; Michigan Sweeping Compound Co., Detroit, 3 cents; Payson Manufacturing Co., Philadelphia, 2.75 cents; John Shea Co., Lawrence, Mass., 2.9 cents in fiber containers; A. M. R. Chemical Co., Brooklyn, 3 cents; Hugh Reilly Co., Washington, 4.5 cents, metal or plywood containers; Mobile Drug Co., Mobile, Ala., 4.17 cents, cwt, paper lined jute bags; Sydol Laboratories, Newark, N.J., 5 cents; and M. E. Mason, Philadelphia, 2.5 cents a pound.

Army Engineer Awards

R. M. Hollingshead Corp., Camden, N. J., received the award on 1,400 gallons of floor wax with a bid of $1.10 a gallon in a recent opening for miscellaneous supplies by the Army Engineer Corps, New York. In a similar opening for cleaning supplies by the Army Engineer Corps at Norfolk, Va., the following awards were made; Yavner Brothers, Norfolk, 48 quarts of "Clorox," 11.4 cents, 1,500 pounds of laundry soap powder, 24.3 cents, 625 pounds of hand soap, 28.9 cents and 630 pounds of hand toilet soap, 28.9 cents; Norman Supply Co., Norfolk, 288 cans of metal polish, 25 cents; R. W. Hudgins & Son, Norfolk, 60 quarts of ammonia, 12.3 cents; 360 pounds of paste hand soap, 10.083 cents; 630 pounds of powder cleanser, 12.84 cents; 215 pounds of bar cleanser; 8.4 cents and 144 pints of combination polish and cleaner, 8.57 cents; Paxton Co., Norfolk, 280 pounds of toilet bowl cleaner, 8.57 cents; and Henry Walke Co., Norfolk, 60 quarts of liquid floor wax, 55 cents.

P. O. Scouring Powd. Bids

The following bids were received on 24,000 pounds of scouring powder in a recent opening for miscellaneous supplies by the Post Office Department, Washington, D.C.: Atwood Manufacturing Co., Wilmington, Del., 9 cents a pound; Pal Products Manufacturing Corp., Brooklyn, 4.4 cents; Fischer Industries, Cincinnati, 8 cents; Imperial Products Co., Philadelphia, 8.1 cents; Unity Sanitary Supply Co., New York, 11 cents; I. Rokeach & Sons, New York, 4 1/6 cents; Chemical Manufacturing & Distributing Co., Easton, Pa, 4.5 cents.

AQMC Bids, Awards

The award on 8,000 pounds of DDT larvicide in a recent opening for miscellaneous supplies by the Army Quartermaster Corps, New York, went to General Chemical Div., Allied Chemical & Dye Corp., New York, with a bid of 31 cents.

Two other AQMC awards in recent openings on insecticides were received by R. J. Prentiss & Co., New York, with a bid of $21.50 cwt, on 6,000 pounds of DDT insecticide; Michigan Chemical Corp., St. Louis, Mich., with a bid of 22.5 cents a pound on 34,000 pounds of DDT insecticide, and Private Brands, Clifton, N.J., who received the award on 93,750 gallons of airplane spray insecticide with a bid of 88.5 cents a gallon. In another Army Quartermaster Corps, New York, opening, General Dyestuff Corp., New York, received the awards on two detergents openings. One was for 1,169 gallons with a bid of 13.9 cents, the other 100,000 pounds at 28.75 cents.

Our

DEODORS

will solve your masking problems

Deodors are always effective
in neutralizing and perfuming
sprays, disinfectants, and other
technical items.

The result will be
a clean, fresh smell,
universally pleasant.

schimmel

SCHIMMEL & CO., INC.
601 West 26th Street
New York 1, N. Y.

NEW TRADE MARKS

THE following trade-marks were published in the June issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

DARLING—This in upper and lower case, medium bold, script letters for soap. Filed Feb. 1, 1946 by Wales Products Co., New York. Claims use since May 3, 1921.

CAL-FLOR-DRY—This in upper case, open, italic letters for granular preparation for absorbing oil and grease from floors. Filed Mar. 25, 1946 by Flor-Dry Co., St. Paul Minn. Claims use since July 15, 1943.

PHILLSOLV—This in upper case, bold letters for solvents in metal degreasing. Filed July 24, 1946 by Phillips Manufacturing Co., Chicago. Claims use since Jan. 1, 1940.

THE GOTHIC LINE—This in upper and lower case, extra bold, black letters for oil soap. Filed June 4, 1947 by Red Spot Paint & Varnish Co., Evansville, Ind. Claims use since Sept 24, 1914.

R-W—This in upper case, extra bold, oversize letters within a circle for powdered, rug and upholstery cleaner. Filed June 10, 1947 by The R. W. Co., Los Angeles. Claims use since Apr. 22, 1947.

RID—This in upper case, extra bold, oversize, italic letters for steel wool pads and soap. Filed June 18, 1947 by International Steel Wool Corp., Springfield, O. Claims use since June 1, 1925.

Drawing of a winged steed in flight for compositions for cleaning rugs, upholstery and textile fabrics. Filed June 24, 1947 by Socony-Vacuum Oil Co., New York. Claims use since June 24, 1947.

GLOSILK—This in upper case, bold letters on a pennant background for cream shampoo for the hair. Filed May 27, 1946 by Plough, Inc., Memphis, Tenn. Claims use since May 14, 1946.

KLEEN FLUSH—This in upper and lower case, reverse letters on a black circular background for disinfectant. Filed Oct. 1, 1946 by Southern Metal Stamping Co., New Orleans. Claims use since Mar. 11, 1946.

PEROLINE — This in upper case, extra bold, stencil letters for rust preventing coating oil. Filed Apr. 23, 1947 by American Chemical Paint Co., Ambler, Pa. Claims use since July 10, 1923.

NUSHADE — This in upper case, extra black, bold letters for cleaning compound for window shades, etc. Filed July 25, 1946 by Keystone Window Shade Co., Pittsburgh. Claims use since June 1, 1928.

BATH TUNES—This in upper case, bold, outline letters on a musical scale for soap and bubble bath preparation. Filed Nov. 9, 1946 by Illustrated Soap Co., New York. Claims use since Sept. 25, 1946.

FYM CO—This in upper case, open letters the "Co" in back of and under the letter "y" for furniture and floor polish. Filed Dec. 4, 1945 by French Veneer Manufacturing Co., Los Angeles. Claims use since April, 1913.

VARNIWAX—This in upper case, bold letters for liquid polishes for furniture. Filed Dec. 16, by Varniwax Co., Birmingham, Ala. Claims use since Jan. 1, 1945.

CARDIS—This in upper case, bold, stencil letters for wax material for use in polish. Filed Dec. 31, 1946 by Sun Chemical Corp., New York. Claims use since May 27, 1946.

WHITE BLOSSOM—This in upper case, open and shadow letters for floor waxes and polishes. Filed June 23, 1947 by Hecht Co., Washington, D. C. Claims use since Sept. 15, 1940.

SPLASH—This in upper case, bold reverse, letters on a solid rectangular background for soapless detergent in concentrated liquid form for washing woolens. Filed May 8, 1947 by Lorco Corp., New York. Claims use since Apr. 16, 1947.

TERYL—This in upper and lower case, extra bold, script letters for shampoos. Filed July 29, 1946 by Sadie M. Mikeselle, Hollywood, Calif. Claims use since Oct. 1, 1945.

SUPER SIX CLEANER—This in upper and lower case, bold letters for the first two words and upper case, bold letters for the final word, which appears beneath the other two for detergent preparation in granular, powdered and/or flake form for use as a general purpose cleaner. Filed Dec. 20, 1945 by Klenzade Products, Inc., Beloit, Mich. Claims use since Jan. 1, 1940.

RIGHT-NOW—This in upper case, extra bold, black outline letters for washing powder. Filed July 15, 1946 by Hermosa Products Co., Portland, Ore. Claims use since May 1, 1920.

A rectangular drawing of a fanciful figure scrubbing a wall for concentrated liquid solution for cleaning walls and wood, metal and other surfaces. Filed Oct. 3, 1946 by Hamilton Distributing Co., Cleveland. Claims use since Feb. 1, 1946.

Y—This in lower case extra bold, script letter within a circle, which is part of a rectangular drawing for chemical preparations for the cleansing and polishing of metals. Filed Apr. 3, 1947 by Yosemite Chemical Co., San Francisco. Claims use since Sept., 1946.

PN-700—This in upper case, bold letters and numerals within an oval and above the words "Makes Water Wetter" for washing powder or liquid. Filed May 1, 1947 by Service Industries, Philadelphia. Claims use since Nov., 1942.

GLOSAN—This in upper and lower case, extra bold, italic letters for odorless disinfecting fluid for disinfecting dishes, glasses, tableware and other utensils. Filed Oct. 18, 1946 by Slick-Shine Co., Newark, N. J. Claims use since Sept. 1, 1946.

GINGISOL—This in upper case, bold, italic letters for dentifrice. Filed Jan. 16, 1947 by Gingisol Laboratories, Cleveland. Claims use since Aug. 7, 1946.

NO-ODA—This in upper case, bold, italic letters for air purifiers for hanging in refrigerators, etc. Filed Apr. 12, 1947 by No-Oda Products Co., Evanston, Ill. Claims use since Sept. 9, 1946.

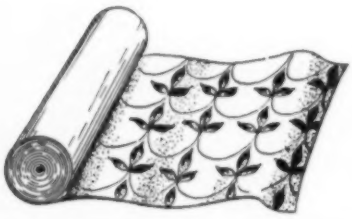
Fanciful drawing of two knights jousting beneath the words, "When Knights Were Bold" for shampoo. Filed Nov. 16, 1946 by Gourielle, Inc., New York. Claims use since Apr. 5, 1945.

The following trade marks are published in compliance with section 13 (a) of the Trade Mark Act of 1946. Notice of opposition must be filed within 30 days of publication and a fee of $25 must accompany each notice of opposition.

ONESHOT—This in upper case, open letters for upholstery cleaner. Filed Sept. 27, 1947 by Best Upholstery Cleaners and Dyers, Memphis. Claims use since Jan. 21, 1947.

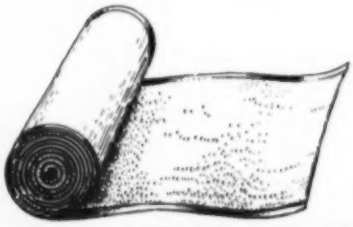
TEEM—This in upper and

If it helps dye silk



protect milk

wash rugs



and kill bugs

what can it do for you?

"VERSATILE" is the word for Wyandotte Kreelon, the new synthetic organic detergent. A surface-active agent with excellent wetting, sudsing and cleansing properties, it has countless applications in the manufacture of cleaning and washing compounds, textiles, insecticides and leather. Its uses extend to the Metal Finishing, Paper, Food Processing and many other industries.

Kreelon reduces the surface tension of water and aqueous solutions effectively. It peptizes, disperses, penetrates, emulsifies and cleanses as it wets. Because it retains these properties in acid, neutral or alkaline solutions—and in hard or soft waters—it may be used to advantage either alone or in solutions and dry mixes with a great number of other chemicals.

Wyandotte Kreelon is economically priced for quantity or small lot consumption.

• *Write for your free copy of the new 28-page booklet describing the properties and suggested uses of Wyandotte Kreelon.*

WYANDOTTE CHEMICALS CORPORATION
WYANDOTTE, MICHIGAN • OFFICES IN PRINCIPAL CITIES

Soda Ash • Caustic Soda • Bicarbonate of Soda • Calcium Carbonate • Calcium Chloride • Chlorine • Hydrogen • Dry Ice • Glycols
Ethylene Dichloride • Propylene Dichloride • Chloroethers • Aromatic Sulfonic Acid Derivatives • Other Organic and Inorganic Chemicals

Wyandotte
REG. U. S. PAT. OFF.

lower case, extra bold, script letters for synthetic detergents of the alkyl aryl sulfonate type for general cleansing purposes. Filed Sept. 16, 1947 by Pacific Coast Borax Co., Los Angeles. Claims use since Feb. 28, 1947.

RO-M-AR—This in upper case, extra bold, outline letters in the form of an arc for shoe polish. Filed July 9, 1947 by RoM-Ar Co., Akron, O. Claims use since May 3, 1947.

GELEVAN—This in upper case, bold letters for anti-bacterial soap compound. Filed Sept 22, 1947 by Continental Chemical Co., Cleveland, O. Claims use since May 44, 1946.

PYE-YAH—This in upper case, extra bold letters for shaving soap. Filed Sept. 30, 1947 by Bermac Associates, Inc., New York. Claims use since June 27, 1947.

F-H—This in upper case, extra bold letters for granulated washing powder. Filed Oct. 6, 1947 by Frank Harris Laboratories, Los Angeles. Claims use since Dec. 10, 1941.

SHAVER'S DELIGHT—This in upper case, bold letters for shaving soap. Filed Oct. 10, 1947 by J. B. Williams Co., Glastonbury, Conn. Claims use since Dec. 8, 1899.

D'AUBIGNE—This in upper and lower case, bold, script letters for cream shampoo. Filed July 5, 1947 by Donald . Merrell & Co., Cincinnati. Claims use since May 15, 1945.

MIRACULENE—This in upper case, extra bold letters for chemical solvent for cleaning fuel pumps. Filed July 5, 1947 by Fischer Industries Inc., Cincinnati. Claims use since Oct. 1, 1939.

BIG VALUE—This in upper case, bold letters for germicide and disinfectant. Filed Aug. 29, 1947 by B. Green & Co., Baltimore. Claims use since June 15, 1935.

PRYZ—This in upper case, extra bold, shadow, italic letters for dentifrices. Filed Aug. 15, 1947 by Pryz Co., Portland, Oreg. Claims use since July 1, 1947.

SUDZY DUDZY—This in upper case, open letters, one word above the other for soap. Filed Oct. 27, 1947 by Essential Chemicals Co., Milwaukee. Claims use since Aug. 8, 1946.

SILVER FOAM SOAP—This in upper case, open letters above the fanciful drawing of a woman at a wash tub for granulated soap. Filed Oct. 6, 1947 by K. C. Working Chemical Co., Long Beach, Calif. Claims use since June 14, 1938.

LOOK—This in upper case, bold letters for washing compound. Filed Sept. 11, 1947 by Climalene Co., Canton, O. Claims use since Apr. 9, 1947.

WONDERTAB—This in upper and lower case, extra bold, script letters for germicidal denture cleanser. Filed July 5, 1947 by Wondertab, Inc., Chicago. Claims use since May 5, 1947.

WALGREEN—This in upper case, extra bold, black letters for hand, dish and glass washing compound. Filed Aug. 11, 1947 by Walgreen Co., Chicago. Claims use since Aug. 25, 1937.

LANELLE—This in upper case, bold letters for cleaning compound for toilets and urinals. Filed Oct. 17, 1947 by Sanitary Soap Co., Paterson, N. J. Claims use since Jan. 3, 1947.

BOON—This in upper and lower case, open letters on a bottle shape figure for liquid cleaning preparation. Filed Nov. 25, 1947 by Clorox Chemical Co., Oakland, Calif. Claims use since Apr. 23, 1946.

DG—This in upper and lower case, extra bold, script letters for soap. Filed Dec. 6, 1947 by Lehn & Fink Products Corp., Bloomfield, N J. Claims use since 1933.

METSO—This in upper case, reverse letters on a rectangular background for cleansing compound. Filed Oct. 21, 1947 by Philadelphia Quartz Co., Philadelphia. Claims use since Oct. 10, 1930.

METSO—This in upper case, reverse letters on a rectangular background across two figures that appear to be walking, for cleansing compound. Filed Oct. 21, 1947 by Philadelphia Quartz Co., Philadelphia. Claims use since Oct. 10, 1930.

TE-OL—This in large and small, extra bold, italic letters for preparation for relief of athlete's foot. Filed Sept. 30, 1947 by Sorbol Co., Mechanicsburg, O. Claims use since Nov. 10, 1938.

PRI-MET—This in upper case, bold letters for preparation for removing rust from metal surfaces. Filed Oct. 29, 1947 by Johns Manufacturing Corp., Dunellen, N. J. Claims use since Jan. 6, 1947.

NIFOS—This in upper case, bold letters for chemical products for use as insecticides and rodenticides. Filed July 12, 1947 by Monsanto Chemical Co., St. Louis. Claims use since Aug. 15, 1947.

A star within a heavy circle for quaternary ammonium compounds. Filed July 5, 1947 by Armour and Co. Chicago. Claims use since Sept. 1, 1941.

D AND D—This in upper case, extra bold, block and extra bold, lower case, script letters, the letters "d" above and below the word "and", all within an unclosed circle emanating from the letter "d" of the word "and" for chemical wetting agent used as a wall paper remover. Filed Sept. 4, 1947 by Demert & Dougherty, Inc., Chicago. Claims use since June 9, 1947.

'ANT SCOTTERS'—This in upper case, extra bold letters for ant, roach and fly poison. Filed Sept. 19, 1947 by C. C. Smith Laboratories, Mansfield, O. Claims use since Dec. 20, 1946.

STED—This in upper case, bold letters for surface active compounds for use as emulsifiers. Filed Oct. 17, 1947 by Monsanto Chemical Co., St. Louis. Claims use since Oct. 1, 1947.

KABON—This in upper and lower case letters for quaternary ammonium compounds for use as a germicide. Filed Nov. 20, 1947 by Monarch Soap & Chemical Co., Minneapolis. Claims use since Aug. 1, 1947.

MARLATE—This in large and small upper case, open and shadow letters for methoxychlor insecticide. Filed Dec. 6, 1947 by E. I. du Pont de Nemours & Co., Wilmington, Del. Claims use since Sept. 17, 1947.

BAXEAL—This in upper case, bold, stencil letters for chemical used in laundries for the control of bacteria. Filed Dec. 10, 1947 by Allied Petroleum Corp., Chicago. Claims use since Dec. 1, 1946.

ALUMILENE—This in upper case, extra bold, black letters for cleaning powder for cleaning aluminum. Filed July 5, 1947 by Fischer Industries, Inc., Cincinnati. Claims use since Oct. 1, 1939.

COCOA ALMOND—This in upper case, extra bold letters for soap. Filed Aug. 7, 1947 by Los Angeles Soap Co., Los Angeles. Claims use since Feb. 23, 1915.

WARCO—This in upper case, bold letters for liquid chemical preparation for cleaning windshields, windows and glassware. Filed Aug. 9, 1947 by Warwick Laboratories Co., Brooklyn. Claims use since May, 1935.

"ROSANOL L"—This in upper case, bold letters for synthetic preparation for use as a detergent and wetting agent for general household and commercial cleaning purposes. Filed Sept. 8, 1947 by Rosenthal-Bercow Co., New York. Claims use since Aug. 21, 1942.

Four sided figure superimposed upon a circle for detergent for cleansing the skin, kitchen utensils, tile, bathroom fixtures, painted woodwork, marble, glass and similar articles. Filed Oct. 20, 1947 by Utility Co.,

(*Turn to Page* 81)

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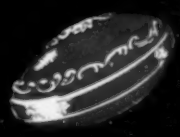
A name long famous in the perfume and essential oil field. ELAN TIBET Savon is now produced specifically for the scenting of fine soaps . . . at the repeated request of many of our clients who have already used the essence ELAN TIBET with unusual success in the perfume and cosmetic markets.



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RAW MATERIAL MARKETS

As of July 1, 1948

TALLOW prices continue on their unpredictable way. A month ago when other oils and fats were inclined to rise, tallow prices were stabilized at a relatively low figure. During the last few days of June, the situation was completely reversed. Tallow prices jumped from 13 to 17 cents a pound in the space of a day or two, just prior to the announcement of the third quarter export allocation of fats and oils by the U. S. Department of Agriculture, while other oils and fats reversed their upward climb when the allocation figures were released. Tallow's price advance subsequently subsided and the current quotation is 16½ cents for fancy grade. A month ago tallow was selling for 13 cents a pound.

Oils selling for less now than a month ago include coconut at 23½ cents, down 2½ cents; cottonseed at 32 cents, down 4¼ cents; soybean, 24¼ cents, off 3¾ cents; corn, 33 cents, lower by 1½ cents. Copra prices are lower than they were a month previous, current quotations being about $295.00 a ton, Pacific Coast, as against $325.00 during the early part of June.

Lard, like tallow, was the exception to the general trend, and was selling at 23.05 cents during the closing days of June, against 22.85 cents a month earlier. Lard reflected the jump in hog prices which rose $3.75 a hundred pounds during the month. Scarce cattle showed an increase of $2.50 a hundred weight in June.

The copra picture at present is not encouraging as far as the Philippines are concerned. Exports from the Islands during May were at their lowest point since June, 1947, and total exports for the period January to May were 30 percent under figures for the comparable period a year ago. During the first five months of the year 300,744 long tons of copra and 13,282 tons of coconut oil were shipped by the Philippines. The Netherland Indies, on the other hand, reported May was the best month for copra shipments during 1948. Malay's copra export figure for May, 2,305 long tons, was the best since resumption of copra trading in 1946. During May the N.E.I. shipped 23,223 long tons of copra, with indications that the figure would be topped by about 3,000 tons in June. So far this year, 76,941

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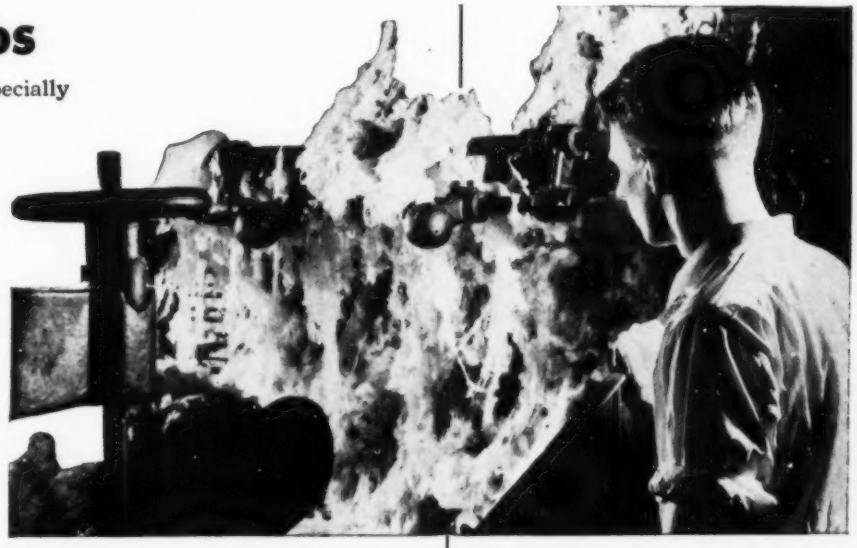
Barrett* Cresylic Acids are especially valuable in textile scouring compounds for removing natural greases and paint from raw wool. These standardized mixtures of tar acids, including cresols, blended to meet particular commercial requirements, are also widely used in the production of commercial disinfectants and metal-cleaning compounds.



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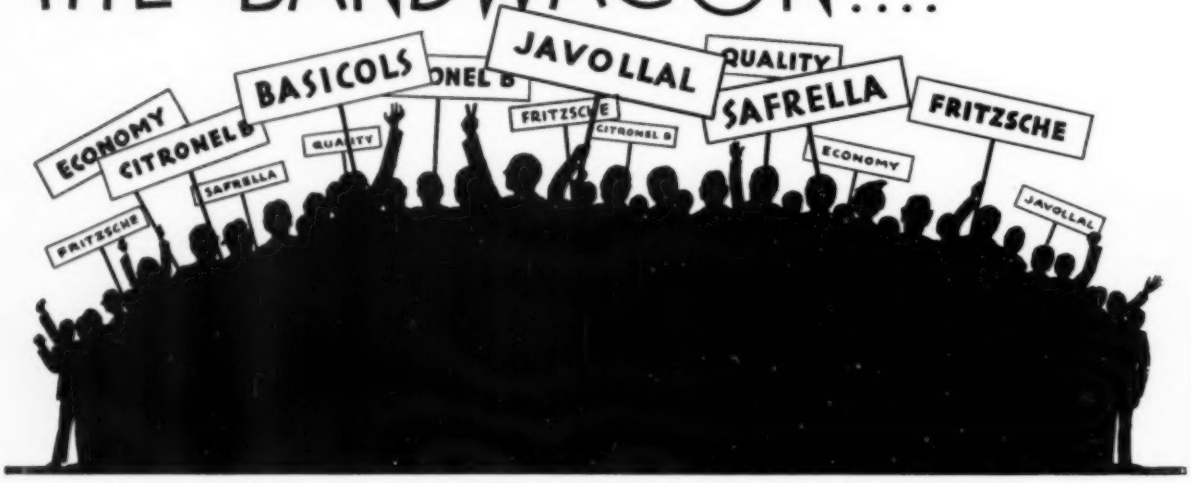

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SAFRELLA — A substitute for Artificial Sassafras, widely used in laundry and low priced toilet soaps, insecticide, germicide and all technical products requiring some perfume.

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tons of copra have been exported by the Netherlands Indies, against 69,854 tons for the comparable period in 1947.

Folowing a week's tour of the livestock producing regions in Kansas, Texas, Colorado and Wyoming, as guest of Armour & Co., the Commissioner of the Department of Markets of New York and the president of the Retail Meat Dealers of Western New York reported that the prospects for an increased supply of livestock and lower meat prices were not encouraging.

Despite record consumption of domestic fats and oils during Oct.-Mar. of the 1947-48 crop season (330 million pounds greater than in the comparable period a year earlier), high level domestic production and increased imports resulted in some increase in stocks. Holdings at the end of April were 1,425 million pounds, as against 1,428 million pounds on a corresponding date in 1947, according to figures released recently by the Bureau of the Census of the U. S. Department of Commerce. The production of inedible tallow and grease, the soap makers two most important fats and oils from the standpoint of consumption, has been favorable during the 1947-48 season. An output for the season of 1,850 million pounds is expected.

Price advances on carnuaba wax followed reports that Brazil was once again discussing the possibilty of placing a floor under carnauba wax prices. As a result increases of from 4 to 5 cents a pound were put into effect.

Returning of the sale of fats and oils for export to commercial exporters rather than buying directly from prime producers was requested recently by the merchant food exporters committee of the Independent Merchant Exporters' Association. The protest against the present method of handling exports of fats and oils was presented at a meeting with officials of the Office of International Trade. Recall of foreign purchasing missions and discontinuance of embassy ordering of supplies direct from producers was also asked by the commercial exporters.

A sharp cut in the price of pine oil was made during the month. The price was reduced from 8.5 to 6.2 cents per pound in tank cars, f.o.b. plant bringing pine oil prices on a gallonage basis down to about 56.43 cents. Prices on drums in carload and less than carload lots are now 7.5 cents and 9.88 cents, respectively. Formerly the prices were 9.5 cents and 11 cents.

DDT, following reports of scarcity as a result of plant close-downs earlier this spring to avoid over-production, has just risen 5 cents a pound, technical grade. The new price of 34 cents a pound represents an increase of 5 cents over the former 29 cent figure. With some firms being reported oversold, the prospect of a shortage of DDT by Sept. 1 is a distinct possibility.

The downward price trend in the essential oil and aromatic chemicals market still continues to be the principal feature. As a result of large stocks held by consumers, and reduced activity particularly in the toilet goods and cosmetics field, the market for perfuming materials continues in the doldrums.

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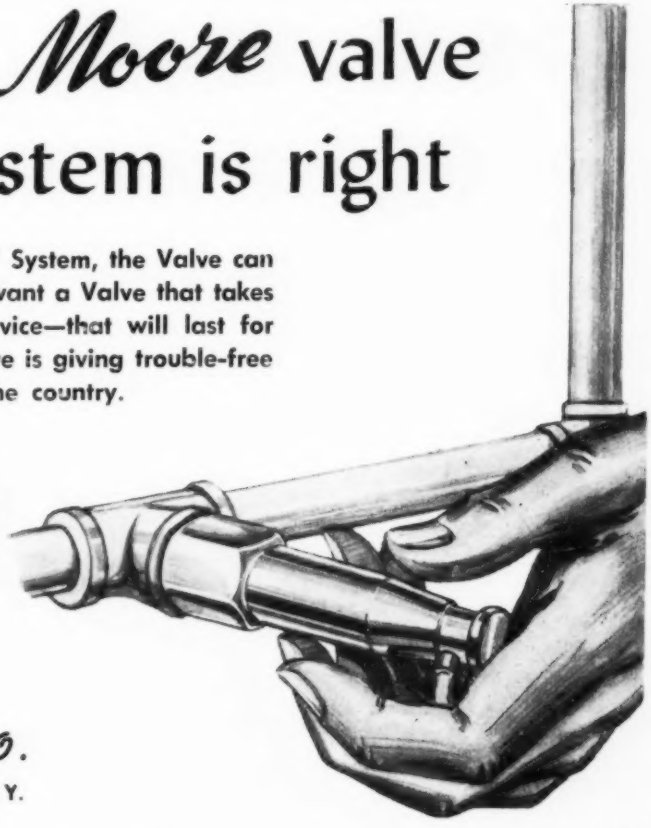

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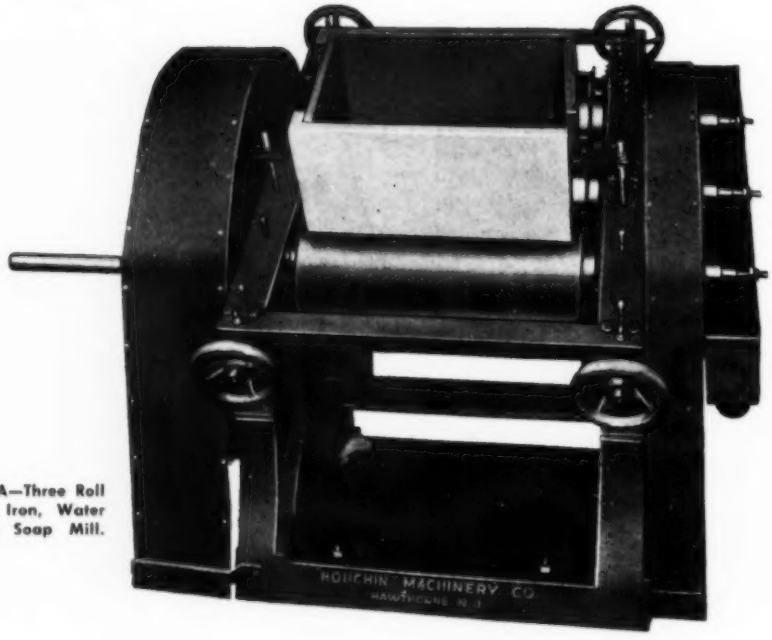

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This Houchin Soap Mill is especially efficient for the quality production of fine toilet soaps.

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German Synthetic Detergents

RESEARCH in the field of synthetic detergents has been very intensive in Germany in the last ten years. A review of the subject condenses material from F.I.A.T. Final Report No. 1141 and B.I.O.S. Final Reports No. 1646 and 1151. The original reports cover 350 pages, and include not only a detailed study of individual commercial products, but methods of evaluation, and theoretical findings as to significance of chain length and other studies of structure. A redeposition test is described in which carbon black is stirred with a solution of detergent under test, in the presence of a piece of white cloth. The relative degree of graying of the cloth was evaluated by eye.

Alkyl Sulfates

With alkyl sulfates it was established that detergent efficiency increases as the carbon chain increases from C-12 to C-18. However, the saturated C-18 alcohol sulfate is too insoluble to be useful except for white wash, where a high temperature is employed. Oleyl alcohol sulfate has detergent properties equal to those of stearyl alcohol sulfate, and has sufficient solubility to be used at a low temperature. It is considered the most suitable alkyl sulfate for commercial laundry and textile use, both for cotton and for wool. The C-12 to C-14 alcohols give better products for household use because of their better foaming properties, and because they can be spray-dried to powders which are harder and less sticky. The combination of alcohols from coconut or palm kernel oil is considered best for preparation of a product for the fine wash.

Introduction of two chlorine atoms in the chain will make octadecyl alcohol sulfate practically equivalent to oleyl alcohol sulfate. The foaming and detergent qualities of Oxo-alcohol sulfates depend greatly on the quality of the starting olefin, but can be practically equal to those of the fatty alcohol sulfates, Olefins, obtained by cracking hard wax from the Fischer-Tropsch synthesis give better Oxo-alcohol sulfates than the primary olefins obtained directly from the Fischer-Tropsch synthesis; probably the latter have more branching in the olefiin chains.

The Igepons

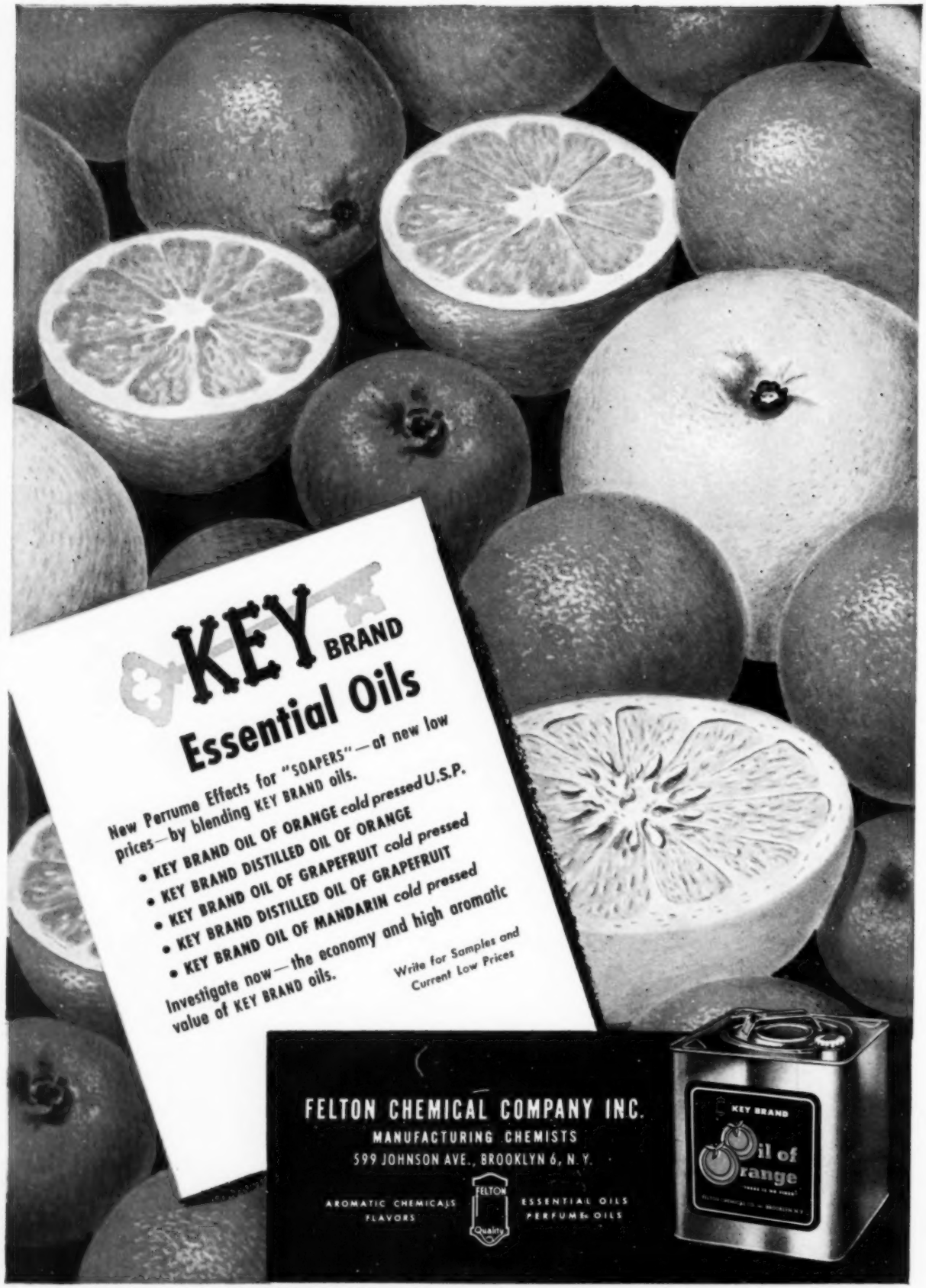
In general the detergency of the "Igepons" increases with an increase in the length of the saturated fatty acid chain from C-12 to C-16. Products from stearic acid have a poor balance of hydrophobic and hydrophilic groups. The products from oleic acid are the most suitable of this class for the textile industry for both cotton and wool washing, so that the term "Igepon" by itself usually refers to the oleyl compound. The shorter chain products are not as good as detergents, but because of better solubility and foaming, are more desirable for household use. "Igepon T" is the sodium salt of methyl taurine condensed with oleyl chloride, while "Igepon A" is the sodium salt of sulfonated ethyl oleate. "Igepon T" is considered better for removing solid soil. Since "Igepon A" is an ester, it is less stable toward acid and alkali, but was used extensively in the textile industry for neutral wool washing.

The Medialans

"Medialans A," $C_{17}H_{33}CON(CH^3)CH_2COONa$, is similar to soap in many of its properties, but is much more resistant to hard water. Its detergency is about equal to that of sodium oleate. One interesting claim made for this product is its mild action on the skin. It does not defat the skin as other synthetic detergents are said to do. When tested by a board of medical doctors, it was reported to be the best skin detergent they had ever examined. The product derived from coconut fatty acid is more desirable than that from oleic acid for washing the skin because of its superior lathering properties. It is too soft, however, to form a bar. The use of mixtures of coconut and stearic derivatives has been studied in the formulation of shaving creams. A product containing ⅔ stearic and ⅓ coconut derivative is an excellent shaving preparation. These products have a bad taste and cannot be used in dentifrices.

Polyethylene Oxide Types

The first important detergent of this class, "Leonil O," was produced from oleyl alcohol and 20 mols. of ethylene oxide. This was considered a very good detergent for wool because of its nonionic nature and consequent freedom from substantivity on wool. It did not foam well and was not very soluble at elevated temperatures. Alkylated phenols and naphthols were studied extensively as replacements in these products for fatty alcohols. Also by sulfating the terminal OH group of the polyethylene oxide, several advantages were realized. One sulfate group is equivalent to at least four mols. of ethylene oxide. Foaming properties and solubility are better in the sulfated product, but the unsulfated compound remains better for washing wool, because of substantivity of sulfate to wool. A 10 per cent solution of the product obtained by condensing hexylheptyl beta-naphthol with four mols. of ethylene oxide, followed by sulfa-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New Perfume Effects for "SOAPERS"—at new low prices—by blending KEY BRAND oils.
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tion and neutralization proved very popular with the housewife, but had to be packaged in glass which was impractical in Germany. The products are too sticky to be spray-dried. A C-6/C-7 monoalkylated beta-naphthol condensed with 8 mols. of ethylene oxide is equivalent to oleyl alcohol condensed with 20 mols. of ethylene oxide. On the alkylated naphthol or equivalent alkylated phenol, eight mols. of ethylene oxide are equal to four mols. of ethylene oxide with a sulfate group added to the end hydroxyl.

Alkyl Sulfonates

The outstanding alkyl sulfonates are the "Mersolates," prepared by treating a mixture of saturated hydrocarbons of C-14 to C-16 chain length, with chlorine and sulfur dioxide, then saponifying. "Mersolate D" contained 40-50 per cent of monosulfonyl chloride, 30-40 of disulfonyl chloride, and the remainder unreacted hydrocarbons. The soap makers saponified it. "Mersolate H" contained principally the monosulfonate as sodium salt, and was used largely as an emulsifying agent. The "Mersolates" are very hygroscopic and must be present in washing powders only in low concentrations, five per cent of "Mersolate D" being somewhat standard.

Tylose

Discovery of the use of "Tylose HB," cellulose glycollic acid ether, with synthetic detergents to prevent development of graying, is important. Every known synthetic detergent requires the addition of such a compound to prevent graying of white cotton during repeated washings. The material does not increase the detergent power of synthetics when measured by the usual laboratory methods, yet no compound has been found which is equal to "Tylose HB" for improvement in washing white cotton with synthetics.

It is the general opinion that the effect of the "Tylose" is to alter the colloidal properties of the detergent solution in such a way that the soil-suspending power is improved and the soil is not deposited in the fabric to as great an extent. The redeposition test referred to previously is only indicative; final evaluation should be based on repeated washing tests, preferably under commercial laundry conditions.

The effect of "Tylose HB" is most apparent at high temperatures and a high pH. Its effect cannot be observed under conditions employed for fine wash, that it, with use of neutral, lukewarm solutions. Therefore its incorporation in a fine-wash product is not considered to be of advantage. When "Tylose HB" is added to synthetic detergents it should be present to an extent of at least 10 per cent of the detergent ingredient. With "Tylose HBR," which itself is only about one-third active, three times as much should be used.. "Tylose" does not improve concentrated soap products, since these already possess the necessary suspending power and proper colloidal properties to prevent redeposition of solid soil. *Soap, Perfumery, & Cosmetics* 21, 364-70 (1948).

WOOL WAX

THE actual fatty secretion in the fleece of a sheep is strictly a wax, not a fat or grease, and should be known as "wool wax." The terms "wool grease" and "wool fat," used synonymously for wool wax, are therefore justified when speaking of these recovered contaminated products, but should not be used to describe the original secretion in the fleece. The purified commercial form of wool wax, lanolin (or *adeps lanae anhydrosus*) is practically free from extraneous fatty acids and closely resembles the original wax.

Wool wax, like the other true waxes, consists of a mixture of compounds of fatty acids with complex monohydric alcohols, thereby differing from the oils and fats which contain compounds of fatty acids with the trihydric alcohol glycerine. Wool wax, however, differs from other waxes in many of its chemical and physical properties. It is unique in its high content of cholesterol and related alcohols and contains several series of acids not known to occur elsewhere. The alcohols of wool wax may be divided into three classes, the steroid, the triterpene alcohols and the normal wax alcohols, each comprising approximately one third of the total alcohols present.

Most of the wool wax acids belong to the unique series and their properties are apparently quite distinct from those of the fatty acids from other sources.

It is only recently that the individual acids have been isolated and identified.

Unlike most of the waxes which are hard and brittle, wool wax is soft and greasy, and tenacious and unctuous to the touch, it is soluble in many organic solvents, but it is insoluble in water and methyl and ethyl alcohols. The outstanding property of wool wax is its ability to form emulsions of the water in oil type; again, this property is unique among the waxes and is attributable to the specific constituent alcohols present.

The original method of recovering wool wax from waste liquors in Bradford, England was the old acid-cracking or "magma" process, in which the spent scouring solutions were treated with a slight excess of acid, and the grease which was precipitated was allowed to settle out: the process has held its own even up to recent times but it has several undesirable features. Of the other processes introduced for the recovery of wool wax, one of the oldest is the "battage" process, from which some of the modern aeration processes have been developed. Later, certain types of wool-scourings were treated in centrifuges, as in the Duhamel and Adams processes, yielding a much purer form of wool wax. Solvent extraction processes have been used with somewhat limited success owing mainly to the strong tendency for

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wool scouring liquor to form emulsions. For the most recent process of this type the wool washings are mixed with trichlorethylene and passed through filter presses to facilitate the subsequent separation of the solvent, from which the wool grease is recovered by distillation.

The uses of wool wax and its products are virtually legion. Not only is the basic material obtainable in many different grades, ranging from pure superfine lanolin to recovered wool grease, but its products include such diverse materials as the saponified grease mixtures, the wool wax alcohols and fractions obtainable from these, the fatty acids and their metallic soaps, the dry saponification products, distillation products, such as wool oleine, wool stearine and wool pitch, sulphonated wool wax, sulphonated wool wax alcohols and acids and hydrogenated and esterified products. It is therefore, not altogether surprising to find that in some form or other, the lanolin of cosmetic and pharmaceutical preparations can also be used in such products as lubricants, plant hormone preparations, paints, motor fuels, soaps and adhesive plasters.

Although, owing to the high proportion of unsaponifiable matter, lanolin is of relatively limited value in the preparation of soaps by saponification, it is one of the most suitable materials for super-fatting toilet soaps, and purified wool wax alcohols are sometimes used for this same purpose. Lanolin is also incorporated into shaving creams. Besides its protective action on the skin during and after washing, it does not go rancid, and has a negligible effect on suds production.

Lanolin is said to have definite bactericidal properties of its own, but it has also been noted that some substances which are normally antiseptic in their action lose their activity when compounded in a lanolin base, it appears that in these cases lanolin acts as a protective agent rather than as an absorption medium. This protective action is made use of in anti-dermatitis or barrier creams, and for the reduction of certain types of occupational cancer.

Abstract of article—"Wool Wax"—A Review of Its Properties, Recovery and Utilization" by D. T. C. Gillespie, M.Sc., published in *The Journal of The Textile Institute*, February, 1948. Vol. XXXIX.

Cracking of Soap

A number of fat bases were used for making toilet soap in order to study the effect on cracking. One conclusion reached was that properly made transparent soaps with 8-10 per cent of moisture show no tendency to crack. Where the soaps were held in frames and not milled, the crystals had a chance to become enveloped by the noncrystalline soap. A tendency to crack can be reduced by intimate milling in of a little white potassium soap, addition of superfatting agents such as lanolin during milling, or by increasing the percentage of liquid soaps present. Sadgopal, *Indian Soap J.* 9, 97-106.

Cation-active Aent

An ethylol guanylurea is obtained from the reaction of guanylurea and ethylene oxide at 10°C. This product is claimed to have highly desirable properties as a surface-active agent of the cation-active type, as an emulsifying agent, an antitoxidant for oils and soaps, and as a softening agent for textiles. W. P. Ericks, to Am. Cyanamid Co. U.S. Patent No. 2,423,643.

Dye Improves Whiteness

When white textiles are washed repeatedly in alkaline solutions, as is customary, they exhibit a tendency towards yellowing. A relatively new ingredient in the soap powder, Rinso, called Solium, combats this tendency. This is a colorless, blue-fluorescing dye. When added to the soap in a proper amount, it builds up in a laundered white shirt or sheet, absorbs ultra-violet light, and re-emits it as a faint blue radiation. The fabric therefore sparkles bright and white.

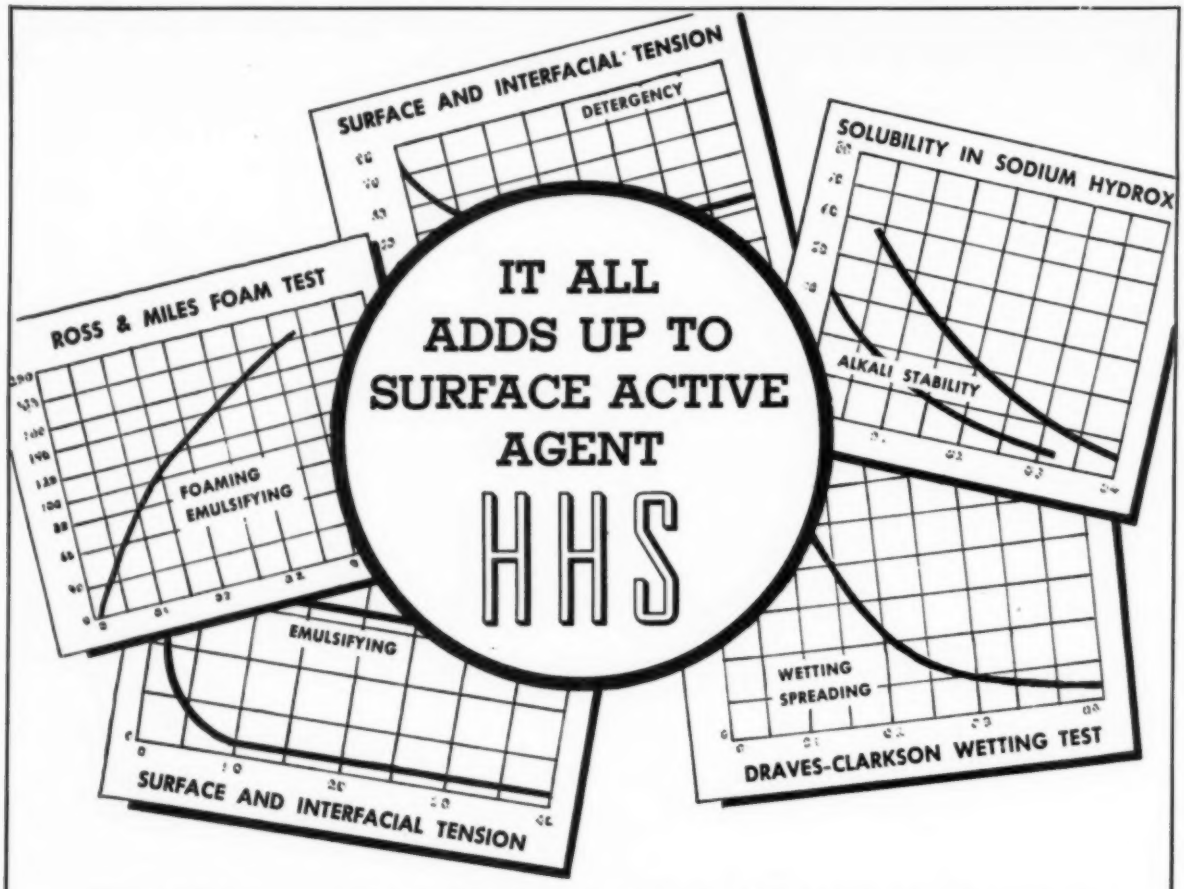
The dyestuffs can be either stilbene derivatives or umbelli ferones. The original German products were known as Blankophors. The German product developed for affinity for cotton was a mixture of the condensation product or diaminostilbene sulfonic acid with two molecules of phenyl isocyanate, and the condensation product of the first compound with cyanuric chloride. Probably modifications were made when this type of product was incorporated into laundry soap. It may be too soon to know whether the difficulties from too great a build-up of fluorescent dye in fabrics have been met. *Manufacturing Chemist* 19, 190-1 (1948).

Soap Making in India

Coconut oil has lent itself admirably to the development of soap making as a cottage industry in India, since it can be saponified in the cold. The states of Travancore, Cochin, and Malabar lead in this industry. The reason is that because of the availability of coconut oil, many people have taken to soap making both as a cottage and as a large-scale industry. Every small town, village, or hamlet is found to have at least a few families engaged in this industry. In addition several large factories have sprung up on the West Coast. Other oils are often mixed with the coconut oil but only in such proportions as to permit cold saponification. D. K. Iyer, *Soap* 1, No. 3, 11-14 (1948).

Surface-tension Studies

Minima in the surface-and interfacial-tension-concentration curves of soap solutions are not to be expected if the materials used are pure. The minima found experimentally must be due to impurities. Assuming the impurities to be salts of multivalent ions present in the water used, the theory explains why the minimum occurs at the critical concentration of the soap, and why a maximum is also shown sometimes. The lack of purity is capable of explaining the known experimental results better than any theory put forward hitherto. The treatment is based on the Gibbs' equation, which is independent of any particular molecular interpretation of the surface layer. D. Reichenberg, Trans. Faraday Soc. 43, 467-79; through *Chem. Abs.*



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PRODUCTION *Clinic*

By E. G. THOMSSEN, Ph.D.

THE problem of reducing dried soap chips to fine size particles arises quite frequently. Unlike many other dry and fragile substances, soap cannot be easily melted to sizes from 160 mesh down to the micron range without considerable difficulty. The last traces of moisture are not removed by conventional dryers. As the soap heats up during grinding operations, it softens or even melts to a messy, pasty mass of lumps that cannot be ground by any type of mill. Its dust is irritating and an efficient dust collection system is necessary to keep employees and factory health inspectors satisfied with the harmlessness of the operations.

Finely ground, pure soap powder finds many uses in considerable volume in the pharmaceutical and cosmetic fields. Pure olive oil Castile soap is probably powdered most generally, although others such as neutral white and palm oil soaps also find adaptations in industry.

Our experience in grinding soaps to small particle size covers many years. During that period many types of mills have been used to produce the desire powdered soap. As we look back to the difficulties encountered with earlier types of mills, we are the more inclined to use modern pulverizers. In certain cases, however, we still find the less efficient grinders in operation. In the earlier days, soapers had fine soap powders custom-ground by drug millers. There was some mystery surrounding the process and it was considered a specialized, slow tedious procedure. It also was a profitable one, as the grinding often cost about as much as the soap.

Mills used for grinding soap powders have undergone considerable change and improvement. Pebble or ball mills, chaser mills, and attrition

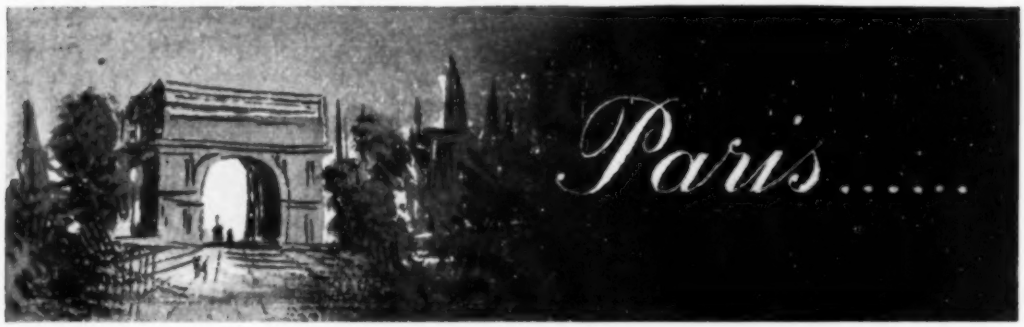
mills comprise the older types. The more modern types are termed pulverizers and micronizers or variations of these terms.

Pebble or ball mills are not satisfactory for grinding large quantities of this soap. The main difficulty is that the grinding operation heats up the soap. Frequent stoppage to cool the mill is necessary. Then, too, considerable dust is raised in charging and discharging the grinder.

The chaser mill has been and is still being used for producing a very fine soap powder. The end product is quite unlike that produced by other machines. It is very fluffy and velvety to the touch. This mill is simple in principle. The fineness of the end product is in direct ratio to the height to which the ground powder rises. The chaser mill consists of two heavy, rough annular granite stones attached to a heavy, vertical, driving shaft. The stone runners, set 180° apart are followed by steel scrapers that are set so as to just clear the bedstone and keep the unground soap well agitated and in a thin even layer as these runners revolve. The bedstone is about five feet in diameter and eight inches thick. It is level and firmly laid in a concrete footing. Along the outside diameter of the bedstone a metal curb or hollow, steel sheet cylinder is installed. The dry soap chips are fed by hand from the floor above through a pipe or chute, as is necessary. They drop onto the bedstone. The entire arrangement is housed in a dust-tight cubical partition which is about two feet wider than the diameter of the bedstone. Double doors open outward to permit entry for the collection of the finished powder. The height of the curb determines the fineness of the powder and capacity of the mill. The powder, of course, is formed by the rolling, crushing action of the runners over the thin soap layer on the bedstone. The scrapers raise the dust over the curb. Chaser mills are small in capacity and grind about 200 lbs. of 160 mesh soap powder in a day. We recently observed a mill of this type in operation that was over 30 years old.

Soap may be ground finely by many different types of attrition mills. As these machines are available in small sizes, they are very adaptable to companies having small capacity and not wishing to put in expensive installations.

The principle of attrition mills, as is well known, is to cause the soap particles to meet at high velocity and explode one another by the impact. The action is accomplished by high speed rotors carrying hammers and deep corrugations that hurl the soap within the annular hollow compartment housing rotors. As attrition mills heat up the soap, in many cases it is important that ample cool air be taken in during the soap grinding operation to prevent the temperature of the soap from reaching the softening point. We have tried several kinds of attrition mills and liked the arrangement best which consists of two squirrel cage type rotors running at



In each of these great centers of the Soap, Perfumery and Cosmetics industries there is a Chiris company, with a complete production and distribution service. These companies pool all the experience and technical resources which nearly 200 years of outstanding leadership in the World's Essential Oil and Aromatic industries have made available to the House of CHIRIS.

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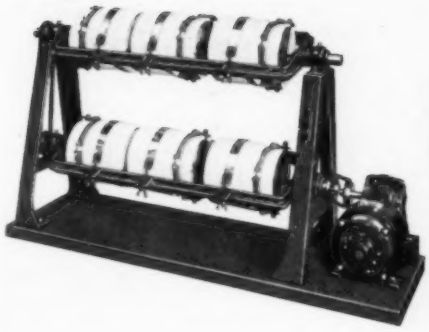

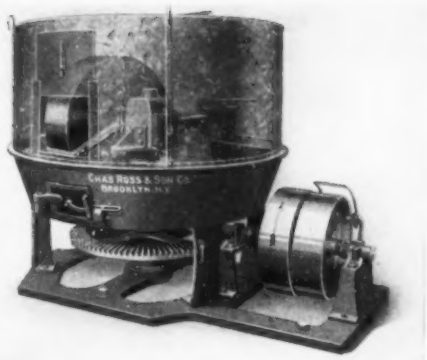

Left and right: Two types of mills used in the manufacture of powdered soap. The mill on the right is the chaser type mill of Charles Ross & Son Co., Brooklyn. Mill on left is an Abbe Engineering Co. double frame multiple jar mill.

high speed in opposite directions and set at just the right clearance to grind the dried soap chips very slowly. These mills are available in small sizes. For an inexpensive installation, they may be mounted directly over a dust tight, powder storage compartment equipped with a dust bag or other proper dust arrester. Such an arrangement is quite handy for smaller plants. It is also possible to equip such mills with a cyclone and powder collector by the use of a proper fan and coarse particle return chute.

In using mills of the types described, consideration must be given to the fact that coarse particles find their way into the fine powders. It is necessary, therefore, to sift the ground powder through a sufficiently fine screen or cloth to assure uniformity. Soap powder in humid weather sticks to the sifting medium. This makes it advisable to adopt either a sifter equipped with a rapping device to properly jar the screen or a centrifugal type screen which keeps the soap powder in violent motion to prevent clogging. In remote cases, installations are made which overlook the economy of returning the tailings directly to the mill. This prevents dust and loss if the closed system is used.

In recent years, the more simple methods of reducing dried soap chips to small particle sizes have been greatly improved upon. In a subsequent article we will consider the more modern methods.

(To be continued)

Proportion Pumping

The "Pulsafeeder," offered by the Lapp Insulator Co. of Le Roy, N. Y., is of interest to those who use proportioned pumping. This apparatus or pump contains a reciprocating piston which accurately displaces measured volumes. It pumps only oil or other neutral media which actuate a diaphragm. This diaphragm prevents contamination by isolating the fluid being handled. The pump is said to be accurate and have many operating advantages. It requires no stuffing box, is assured perfect lubrication of the pump, permits micro-adjustment of the rate of flow while in operation and is not subject to strain. Four sizes from less than 100 ml. to 660 gallons per hours are available. The company's Bulletin No. 262 describes the "Pulsafeeder."

Detergent Claims

Recently a friend handed us a newspaper clipping berating soapers because of the current extended propaganda on household wetting agents. We quote from this complaint: "What are the soap manufacturers trying to shove down the throats of the American housewives? A great number of detergent type 'suds' products continue to come on the market. Each holds forth claims to more magic performance than its competitive item. They all sell at about the same price. Are we women supposed to swallow all these claims and are we suckers!!

Puzzled Housewife."

Recently we heard a group of women discussing detergents. The main complaints were rapid disappearance of the suds, their fluffiness, and especially the dirty food particles in the bottom of the dishpan following the washing of dishes with a detergent. The last was a sickening sight to the majority of them. Women are still partial to good old soap for many of the purposes for which these newer detergents are recommened. We wonder at times when we read the numerous advertisements regarding detergents how it is impossible for users to be other than puzzled. While soap advertisements are muffled to some extent, our observation is that women still prefer soap.

Soil Testing Cloths

Testfabrics, 224 West 35th Street, New York, have sent us a sample of their "Cotton Soil Test Cloth #26." They have recently taken over the manufacture and distribution of this cloth which conforms to Spec. 51 S-47 (INT), Bureau of Ships. General Dyestuff Co., New York, formerly supplied this cloth. Testfabrics are in a position to furnish this cloth to laboratories, as well as five gram and 10 gram (adjusted to $\pm$ 2%) skeins of standard construction fabrics like cotton, wool, silk, acetate, viscose, Bemberg or Nylon, either scoured or as they come from the loom. They are also distributors for "AATCC Multifiber" and "Three Fiber Fabric." Fabrics may be made to order through them for special industrial or other purposes.

Uncle Sam's New Catalog

A new catalog illustrating and describing many sanitary chemical products was issued recently by Uncle Sam Chemical Co., New York. The new catalog is of loose leaf form so that it can be added to any salesman's literature. It is available to distributors and jobbers upon request. In addition to manufacturing a complete line of such sanitary chemicals as disinfectants, insecticides, waxes, polishes, soaps, deodorants and cleaners, the company

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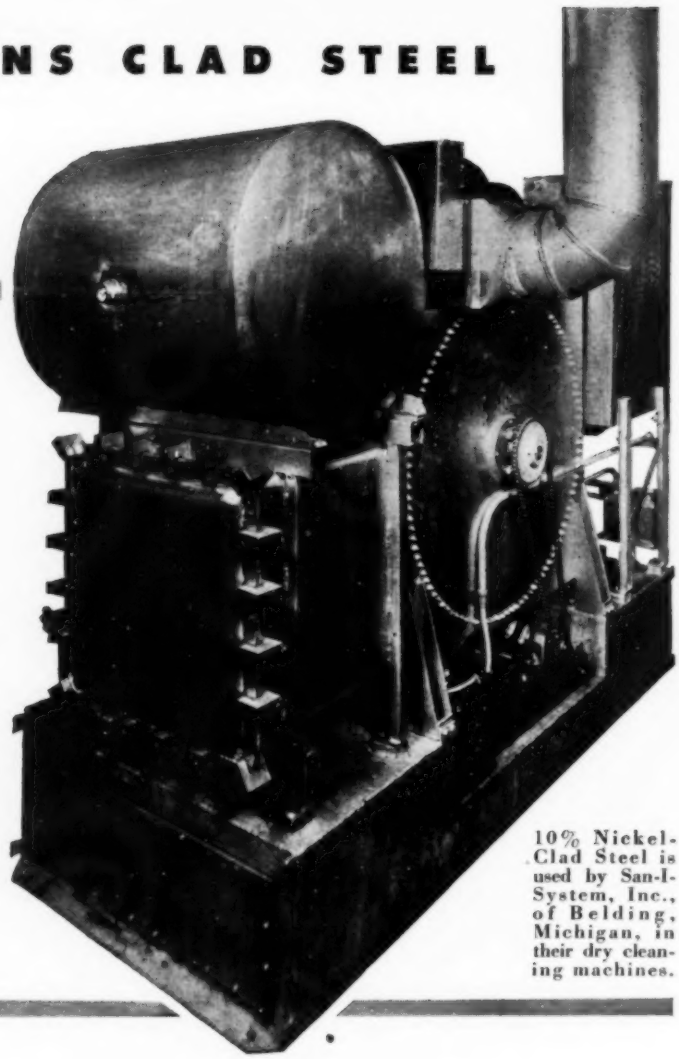

10% Nickel-Clad Steel is used by San-I-System, Inc., of Belding, Michigan, in their dry cleaning machines.

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In Lukens Clad Steels, a uniformly thick cladding of the corrosion-resistant metal is permanently bonded to the steel backing plate. The extra smooth Sodium Hydride Finish, now available upon request, makes cleaning even easier than before. Claddings of 10% or 20% of total plate thickness suit most requirements.

Bulletins 255 and 338 contain data on Lukens Clad Steels. For copies, write Lukens Steel Company, 446 Lukens Building, Coatesville, Pennsylvania.

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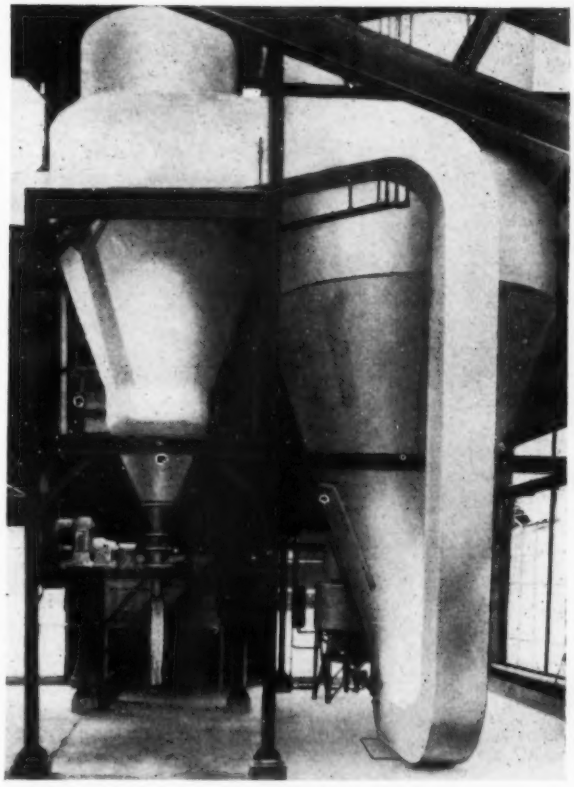
acts as direct distributor for Hudson electric and hand sprayers and dusters and Bobrick soap dispensers. The company also produce private brand labels in its own printing plant.

Small Soap Spray Dryer

A new type spray dryer for production of five to 10 tons of finished product per day was announced recently by Bowen Engineering, Inc., Garwood, N. J. The new spray dryer is furnished as a complete operable unit requiring a minimum amount of field erection. Originally, the unit was conceived as a pilot plant dryer. It was found, however, that the equipment meets a popular production rate and could be sold as a smaller, unit type package, thus enabling savings to be made over larger, custom engineered dryers. Complete instrumentation and safety controls are provided for fully automatic operation. Instruments and controls are located on one terminal board from which complete operating data can be obtained and the operation of the Bowen "High Speed Spray Machine" and other parts of the equipment can be regulated

Offered as a standard model for prompt delivery, the spray dryer can be furnished in milled or stainless steel construction and with direct or indirect heaters, with single or multiple-stage dry collection and wet collection, and with various types of atomizers designed to produce a final product where the individual particle characteristics meet the customer's specifications.

The unit is compact, occupying a floor area of 12 x 20 feet. It can be erected out-of-doors if desired.



At right: The new type spray dryer now being made by Bowen Engineering, Inc., Garwood, N. J., for the production of between five and 10 tons of soap beads per day. The unit is especially designed for the smaller plant and requires a floor area of 12 x 20 feet. It can also be erected out-of-doors, if desired.

Redesigns Floor Machines

A number of new features have been included in the recently redesigned line of "Tornado" floor machines made by Breuer Electric Mfg. Co., Chicago. Changes include placing the control handle in proper relation to the revolving brush to counterbalance starting and running torque, giving the new machines better control and glide across surfaces in an almost automatically self-propelled manner. In addition, it is claimed, engineering study and research have determined the correct combination of brush speed and weight of unit to insure more thorough cleaning and polishing. Another feature is the completely adjustable handle, which removes easily for storage and transport, and lowers easily for tank filling and under desk, etc., operation. The complete line consists of five models with brush spreads ranging from 12 to 20 inches.

Reprint Article on Safrole

Reprints of an article, "Determination of Safrole in the Oil of Ocotea Cymbarum—A Cryoscopic Method," were distributed recently by Dodge & Olcott, Inc., New York. The article, written by Anthony J. Shukis and Herman Wachs of the D&O plant in Bayonne, N. J., was published originally in *Analytical Chemistry*.

Colloid Mill Redesigned

A new, redesigned version of the Charlotte Colloid Mill was announced recently by G.M.T. Colloid Mill Corp., New York. The mill is a high speed disintegrator and emulsifier, in which immiscible liquids, liquids carrying solids in suspension, and pastes are finely dispersed, disintegrated and homogenized. It features a grooved conical rotor which rotates within a correspondingly grooved conical stator; the clearance between them is regulated by a calibrated external adjustment device. The materials to be processed by the mill are fed into the inlet of the mill by gravity. Insecticide emulsions, soaps and wax products can be processed in the Charlotte Colloid Mill.

To License Caustic Unit

Mathieson Chemical Corp., New York, announced recently that it will negotiate licenses for its new stationary mercury cell for the production of chlorine and caustic soda with domestic as well as foreign producers.

Multi-Purpose Filler

MRM Co., Brooklyn, is currently featuring its four and six spout, semi-automatic, liquid, vacuum filler, which is designed for packagers with limited production on a variety of products and containers. Both foamy and still liquids can be filled directly from a flood level reservoir with the

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equipment, which is designed for quick and easy cleaning and change-over. Production capacity ranges from 10 to 12 quarts per minute, depending on the material. Filling range is one ounce to one quart. The filler is equipped with motor and vacuum pump. All contact parts are of stainless steel. The vacuum filler is supplied with a three foot MRM speed adjusting stainless steel rail.

Schimmel "Briefs" Appear

Discussions of several problems arising from cosmetic formulations are highlights of the current issue of Schimmel *Briefs*, monthly, external house organ of Schimmel & Co., New York, which has as its object the furnishing of information to customers in the cosmetic, soap and allied industries.

Industrial Sanitation Book

Controlled industrial sanitation, which "offers management a scientific solution to industrial housekeeping problems," is discussed in a recently issued, two-color, 16-page, lithographed booklet of Industrial Sanitation Counselors, a division of Chemco Co., Louisville, Ky. The new booklet describes in some detail phases of the new service. The first step in controlled industrial sanitation, a survey, includes the following points: a complete sanitation rating; a cost analysis; study of surfaces and equipment used in the plant; and an investigation of eight sanitation factors. Sanitation materials and equipment are chosen or developed for specific cleaning needs in the plant as part of the new service.

USI Aerosol Folder

U. S. Industrial Chemicals Inc., New York, recently issued a four page, two-color folder dealing with the use of "Pyrenone" concentrates in low pressure aerosol formulations. In addition to a brief introduction dealing with the initial uses of aerosol insecticides and a short summary of background information, the folder discusses the application of "Pyrenones" to aerosols and lists a number of formulas containing "Pyrenone." A statement on formula costs is also included.

Hooker Has New Compound

Issuance of a data sheet (No. 350) on benzotrifluoride (trifluoromethylbenzene), a new compound, was announced last month by Hooker Electrochemical Co., Niagara Falls, N. Y. It is a water white aromatic liquid which is completely miscible with most common solvents. Its distillation range is 2° including 101°C; freezing range is from —28.5° to —29.5°C; specific gravity at 15.5°C is 1.197. In addition to good dielectric properties, benzotrifluoride is said to have excellent thermal stability. Samples and literature are avialable by writing on business letterhead.

Dianol Data Sheets

Dianol, Inc., formerly Robert D. Spiers Laboratories, St. Petersburg, Fla., recently issued data sheets on several of its insecticide products, including a DDT type insecticide paint. Properties, applications, results of tests and related information on a yard spray, an insecticide dust, an insecticidal paint and paint insecticides, an insecticide house spray and dog dust are covered in the data sheets. All products are manufacturerd and sold as packed items and in bulk.

TGA Petrolatum Standard

A revised standard for petrolatum was issued during June by the board of standards of the Toilet Goods Association, New York. The original specification was issued in February, 1941. The present revision is one of a series being currently brought up to date and issued by the T.G.A.

Cargille Odor Set

A new odor control set, consisting of 12 perfuming materials for masking odors of manufactured products was announced recently by Cargille Scientific, Inc., New York. The set contains 12 one-ounce quantities of different odor masking agents.

Kiefer Organ Appears

"Kiefer Calling," the spring number of the external house magazine of Karl Kiefer Machine Co., Cincinnati, was issued recently and features the cadet model "Vari-Visco" filling machine. The filling machine is illlustrated and described in the 16-page, two-color booklet, which also shows the Kiefer No. 30 "Morocell" filter. In addition to discussing Kiefer equipment, the current issue of the magazine contains a brief, page feature devoted to Paul R. Fechheimer, vice-president and chief engineer of the company. Other subjects of general interest are covered in "Kiefer Calling," which has as its theme "leadership."

G-4 Disinfectant Bulletin

"Compound G-4 for Household Disinfectants," a four page folder, was made available recently by Sindar Corp., New York, as its technical bulletin, 48-5. It presents the properties and suggested formulas for household disinfectants using compound "G-4," which acts as a fungicide as well as a bactericide.

Book on Fatty Acids

John Wiley & Sons, Inc., New York, recently announced publication of Fatty Acids and Their Derivatives" by A. W. Ralston, assistant director of the chemical research and development department of Armour & Co., Chicago. Methods used to prepare fatty acids are discussed in the first part of the book. Next, derivatives formed by a modification of the hydrocarbon chain are taken up and those resulting from a change in the carboxyl group follow. This book should prove helpful in work dealing with fats and oils, detergents, wetting agents and allied products.

The price is $10.00, and the volume has 968, 5⅜ x 8⅝ inch pages.

Folder on "Stokeswrap"

A fully illustrated, two color folder on the company's "Stokeswrap" automatic packaging machine was issued recently by Stokes & Smith Co., Philadelphia. Various types of installations and products using the machine are shown.

Data and photographs of other Stokes & Smith packaging machinery are also shown.

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TRADE MARKS

(*From Page 61*)

New York. Claims use since Sept. 4, 1947.

BLAIR'S—This in large and small upper case letters for insecticides. Filed Aug. 19, 1947 by Blair of Virginia, Lynchburg, Va. Claims use since July 1, 1936.

MILPROOF — This in upper case, medium bold letters for fungus proofing agent for use in treating textiles and other materials to render them resistant to attack by fungi. Filed Aug. 11, 1947 by Monsanto Chemical Co., St. Louis. Claims use since Oct. 24, 1946.

INDUSPRAY—This in upper and lower case, extra bold, black, script letters for insecticides. Filed Oct. 7, 1947 by Tanglefoot Co., Grand Rapids, Mich. Claims use since Aug. 20, 1946.

TIADYL—This in upper case, bold letters for bacteriostatic for treatment of bacterial infections. Filed Oct. 18, 1947 by Abbott Laboratories North Chicago. Claims use since Oct. 27, 1941.

DUN-L—This in bold, upper case letters for preparation for treatment of athlete's foot. Filed Aug. 7, 1947 by Dun-L Products, Inc., New York. Claims use since Apr. 15, 1947.

VANESS—This in upper and lower case, extra bold, script letters for shampoos. Filed Oct. 15, 1947 by Whitehall Pharmacal Co., New York. Claims use since Mar. 1, 1940.

TRIVEX D-50—This in upper case, bold letters and numerals for insecticide. Filed Oct. 17, 1947 by Westvaco Chlorine Products Corp., New York. Claims use since Sept. 23, 1947.

DEVEX D-50—This in upper case, bold letters and numerals for insecticide. Filed Oct. 17, 1947 by Westvaco Chlorine Products Corp., New York. Claims use since Sept. 23, 1947.

SEFONA—This in upper case, bold letters for amebacide. Filed Nov. 15, 1947 by Sharp & Dohme, Inc., Philadelphia. Claims use since Nov. 7, 1947.

FLORAGLOW—This in upper and lower case, extra bold letters for insecticide. Filed Dec. 8, 1947 by Floralife, Inc., Chicago. Claims use since Nov. 13, 1947.

BLAIR'S—This in large and small upper case, extra bold letters for silver, shoe and stove polishes. Filed Aug. 19, 1947 by Blair of Virginia, Lynchburg, Va. Claims use since July 1, 1936.

WHIZ—This in upper case, open letters for grit paste soap. Filed July 5, 1947 by Davies-Young Soap Co., Dayton, O. Claims use since Apr. 1, 1908.

RENUZIT—This in upper case, extra bold letters for dry cleaning fluids. Filed Oct. 8, 1947 by Renuzit Home Products Co., Philadelphia. Claims use since June 6, 1932.

MEADOWBROOK—This in upper case, extra bold letters for toilet soap. Filed Oct. 23, 1947 by B. Altman & Co., New York. Claims use since Oct. 3, 1947.

FEDERAL—This in upper case, bold letters for wallpaper cleaner. Filed Oct. 23, 1947 by Federal Laboratories, Inc., Pittsburgh, Pa. Claims use since Feb., 1946.

ATLANTIC — This in upper case, open and shadow letters for liquid dry cleaner. Filed Oct. 25, 1947 by Atlantic Refining Co., Philadelphia. Claims use since May 29, 1947.

KADOL—This in upper case, extra bold, black letters for concentrated scrub soap. Filed June 19, 1947 by C. B. Dolge Co., Westport Conn. Claims use since June 19, 1947.

ODAY—This in upper and lower case, open letters for shampoo. Filed Sept. 23, 1947 by Chamblin Co., Jackson, Miss. Claims use since Jan. 15, 1945.

RESECTOCIDE—This in upper case, bold letters for germicide. Filed Aug. 22, 1947 by American Cystocope Makers, Inc., New York. Claims use since July 31, 1947.

UROLOCIDE—This in upper case, bold letters for preparation used for the sterilization of surgical and dental instruments. Filed Aug. 22, 1947 by American Cystoscope Makers, Inc., New York. Claims use since July 31, 1947.

SWEET-AIRE—This in upper and lower case, bold, script letters for bottled liquid which when sprayed deodorizes and freshens the air. Filed Aug. 25, 1947 by Miller Protecto Products Co., Kalamazoo, Mich. Claims use since June 15, 1937.

15X—This in upper case, extra bold, letter and numerals for insecticide. Filed Sept. 26, 1947 by Scientific Supply Co., Denver, Colo. Claims use since Aug. 28, 1947.

SILVER—This in upper case, medium bold letters for deodorant and germicide for general use. Filed Oct. 16, 1947 by Boyle-Midway, Inc., Jersey City, N. J. Claims use since Sept., 1933.

DRO—This in upper case open, letters for insecticides. Filed Dec. 16, 1947 by Chemical Specialties Co., New York. Claims use since Apr. 29, 1947.

METSO—This in upper case, reverse letters for silicate of soda either alone or in admixture with other alkaline salts. Filed Oct. 21, 1947 by Phildelphia Quartz Co., Philadelphia. Claims use since Oct. 10, 1930.

SUE PREE—This in upper and lower case, medium bold, script letters for shampoo. Filed Dec. 19, 1947 by Superior Products Co., Dallas. Claims use since Aug. 1, 1946.

LUSTERTONE—This in upper case, bold letters for preparation for cleaning and restoring the finish of automobiles. Filed July 5, 1947 by Gulf Oil Corp., Pittsburgh, Pa. Claims use since Jan. 4, 1937.

SWEET-AIRE—This in upper and lower case, script letters on a disc background for bottled liquid air deodorizer and freshener. Filed Aug. 21, 1947 by Miller Protecto Products Co., Kalamazoo, Mich. Claims use since June 15, 1947.

McNESS DAIRY KING—This in upper and lower case, bold script and upper case, roman letters for insecticides. Filed Set. 26, 1947 by Furst - McNess Co., Freeport, Ill. Claims use since Mar. 15, 1941.

Drawing of a circle, within which is a sphere, and on both of which are designs for chemical compounds for disinfectant. Filed July 5, 1947 by Diversey Corp., Chicago. Claims use since Jan. 30, 1926.

PMAS—This in upper case, extra bold letters for phenyl mercuric compound used as a crab grass eradicator. Filed Oct. 10, 1947 by W. A. Cleary Corp., New Brunswick, N. J. Claims use since Sept. 27, 1946.

CONTI—This in upper and lower case, open letters within an ornate border for liquid shampoo. Filed Oct. 2, 1947 by Conti Products Corp., Brooklyn. Claims use since Jan. 1937.

Synthetic Detergent Outlook

Uses of synthetic surface-active agents are being directed more and more into fields where soap has never entered. New markets are thus being continually found. Many small soap manufacturers buy various surface-active agents and blend them with other materials, in order to obtain special wetting, emulsifying, penetrating, or cleaning effects. Others buy the unsulfonated hydrocarbons and do their own sulfonating and special blending. The choice of procedure is largely a matter of the investment required and cost of production.

It is in the new and unique uses of synthetics that the greatest development is to be expected. With the present rate of growth, the production of surface-active agents of all types should be over one billion pounds in the next two years. M. Sittenfield, *Chem. Industries* 62, 584-5, 650-2, 658 (1948).

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MAYPON 4C
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Samples
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PRODUCTS AND PROCESSES

Machine-washing Briquet

Briquets for use in machines for washing dishes, milk cans, etc., must have good cleaning action and must also have a uniform reproducible rate of solution. They should have sufficient mechanical strength to withstand handling, and freedom from hygroscopicity during storage. Briquets meeting these requirements are prepared by heating together to 70-100°C. trisodium phosphate and water, then incorporating caustic soda, if this is used, and finally adding soda ash and one or more sodium polyphosphates.

The mixture is allowed to harden in rubber molds, and is formulated to contain 30-50 per cent of water, 10-50 of trisodium phosphate or soda ash or a mixture of these, and 5-50 per cent of at least one sodium polyphosphate. J. D. McMahon, to Mathieson Alkali Works, Inc. U.S. Patent No. 2,435,453.

Cleaner for Engines

A cleaning composition for removing sludge from internal combustion engines consists of:
(1) at least 50 per cent of one or more organic solvents, preferably methyl acetate, amyl acetate, chlorotoluene, chloronaphthalene, dichlorodiethyl, ether, or ethylene dichloride;
(2) five-25 per cent of water;
(3) not over 30 per cent of SAE 20 lubricating oil; and (4) a coupling agent to produce a stable homogeneous composition.
The latter agent is preferably a morpholine soap or other amine soap. Inclusion of free amines, that is, octyl amine or xylidine, is helpful in softening hard lacquer-like deposits on valve stems, piston rings, and the like. George M. Skinner, to National Carbon Co., Inc. U. S. Patent No. 2,432,776.

Detergent Compositions

Compositions suitable for use as detergent, water-treating agent, and deflocculent, vary within the range P_2O_5 2-70, Na_2O 15-65, and SiO_2 10-70. They are obtained in a uniform vitreous state by melting together silica, soda ash, and phosphoric acid in a furnace, and then quickly cooling the melt The degree of crystallinity of such products may be varied within wide limits by submitting the vitreous products to annealing near the softening point. The products have the advantages of being more soluble in water, more efficient in detergent action, and less abrasive. These qualities, especially abrasiveness, can also be varied by changing the chemical composition as well as by changing the physical state. A. G. Pincus, to Am. Optical Co. U. S. Patent No. 2,434,-674.

German Soaps

A specific example of a soap product as made in Germany is according to the following formula:

	Parts by weight
Caustic potash, 50°Be.	79.0
Potash, 98%	15.0
Soda ash	3.5
Synthetic fatty acids (Mersol D)	125.0
Carboxy methyl cellulose (Tylose HBR)	12.5

with the water evolved during saponification, this gives 235 parts by weight of a 40 per cent synthetic detergent product. The soda ash and potash ingredients are first heated together, the preheated fatty acids are added, and after saponification is complete, carboxy methyl cellulose is stirred in. The cooled product has a thick pasty consistency. Various related products are made, using besides "Tylose" and soda ash, such fillers as urea, sodium pyrophosphate and sodium silicate. *Seifen, Ole, Fette, Wasche* 74, 73-6 (1948).

Ti O_2 in Scouring Powder

Scouring and washing powders are prepared by mixing together 10-40 per cent of soap, 20-70 of ground silica, and 10-20 of water-dispersible titanium dioxide. Preferably the titanium oxide is pre-treated with a water-dispersing agent such as a fatty alcohol sulfate or a higher sulfosuccinate ester. Presence of titanium oxide promotes foaming and inhibits undesired abrasion by the ground silica. E. J. Moran. U. S. Patent No. 2,428,317.

Lithium Soaps

Polyphosphates of sodium and potassium are effective in inhibiting precipitation of lithium soaps. Compositions are described consisting of major amounts of the polyphosphates, such as 90 per cent, and lesser amounts of mixed lithium salts such as 80 per cent of lithium hypochlorite mixed with lithium chloride and lithium hydroxide. These compositions yield clear solutions in water in the presence of soap. E. C. Soule, to Mathieson Alkali Works, Inc. U.S. Patent No. 2,435,474.

Palm-kernel Oil Detergent

A palm-kernel fatty acid hydrazide is cyclized with carbonyl chloride to give 2-hendecyl-4-phenyl 1-1,3,4-oxadiazole. Treatment with sulfuric acid yields the 5-sulfonic acid, whose sodium salt is a brown powder useful as a detergent. J. R. Geigy A.—G. Swiss 215,042.

Winterizing Oils

The cold-test values of oils are improved by adding 0.01-0.1 per cent of a vegetable lecithin to a winterized oil, and then winterizing the oil a second time at from 20-45°F. in the usual manner. C. M. Gooding and J. R. Rich, to Best Foods, Inc. U.S. Patent No. 2,435,626.

Purifying Detergents

A solvent containing 50 per cent of a lower monohydric alcohol is used to extract batchwise or continuously a synthetic surface-active agent at 25-50°C. This removes the inorganic salts, water-soluble organic compounds of poor surface activity, and colored impurities found in the aqueous surface-active nitrosation-sulfitation reaction product. L. J. Beckman, to Allied Chem. & Dye Corp. U.S. Patent No. 2,436,243.

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No. 2,440,781, Insecticidal Fumigant Composition with Solid Rubber Carrier Particles, patented May 4, 1948 by Charles W. Murray, Glenside, Pa., assignor to the United States of America as represented by the Secretary of Agriculture. A composition is covered comprising a volatile liquid insecticide and a vehicle therefor consisting of dry hard rubber in finely divided form.

No. 2,440,837, Metal Cleaning Composition, patented May 4, 1948 by Hugh G. Webster, Detroit, Mich., assignor to J. H. Shoemaker. This patent covers metal cleaner comprising an aqueous solution of an alkali metal hydroxide, an alkali metal borate, and an alkali metal cyanide, in proportions, by weight, of 50-90 parts, 4-10 parts, and 5-46 parts, respectively.

No. 2,441,433, Insecticides patented May 11, 1948 by Edward R. McGovran, Hyattsville, Md., and Wilbur A. Gersdorff, McLean, Va., dedicated to the free use of the People in the territory of the United States.

An insecticidal composition which comprises pyrethrum and 1,3 diphenoxypropane.

No. 2,441,553, Liquid Organic Fumigant Containing Polystyrene, patented May 18, 1948 by Edgar C. Britton, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware. The method of fumigating soils and insect-infested areas on living plants which consists in applying to the same a viscous film-forming liquid composition comprising a liquid organic fumigant having polystyrene dissolved therein.

No. 2,442,024, Cleaning and Polishing Composition, patented May 25, 1948 by Herschel G. Smith, Wallingford, Mark L. Hill, Yeadon, and Troy L. Cantrell, Lansdowne, Pa., assignors to Gulf Oil Corporation, Pittsburgh, Pa., a corporation of Pennsylvania. A composition of matter is covered suitable for cleaning the coated metal surfaces of automobile bodies which comprises a major amount of water, a hydrocarbon solvent dispersed in the water in an amount sufficient to assist in removal of grease and other hydrocarbon solubles, oil, an abrasive powder dispersed in the water in an amount sufficient to assist in mechanically removing soil, and small amounts, sufficient to inhibit corrosion, of a water-insoluble higher aliphatic amine salt of 2-ethyl-hexyl, 3-methyl-butyl ortho-phosphoric acid and a water-soluble salt of 2-ethyl-hexyl, 3-methyl-butyl ortho-phosphoric acid, said composition having a pH in the range 6 to 8.

Refining Rapeseed Oil

In refining rapeseed oil having nine per cent acidity, the best yield of neutral oil was obtained with 30°Be. caustic soda solution in one per cent excess. This gave a yield of 82 per cent of oil having 0.014 per cent acidity. The most favorable temperature seems to be 60-80°C. in order to obtain a quick separation and a finished product of good color. No differences were observed by varying the time of treatment between 30 and 120 minutes. Crude oils containing more than 10 per cent of free fatty acid should be deacidified by distillation with steam under reduced pressure. E. Gordon and S. Ragot, Bull. ment. *ITERG* 1947, No. 9, 28-30; through *Chem. Abs.*

Acid Soap in Laundering

Some years ago it was the common British practice to have a water break in laundry treatment before the main suds washes. This was considered useful for removing water-soluble materials which might be present in the soil. Today, more successful results are obtained by employing a strong detergent solution first. This, no doubt, penetrates the intercellular spaces by capillarity, but enough detergent is left to maintain suspending power.

In the acid-soap application, the first detergent bath has a pH of 9.6-10 to start with, but this falls to 9-9.2 because of the natural acidity of the soiled garments. In the next stage, the pH is reduced to 7.6 by addition of sodium dihydrogen phosphate or acetic acid, resulting in hydrolysis and deposition of acid soap. When the pH is increased to 11.2, this acid soap is resaponified to give a highly localized concentration of active soap, which produces rapid emulsification and suspension of the dirt. P. D. Liddiard, *Manufacturing Chemist* 202-4 (1948).

Cracking of Soap

A high percentage of sodium and potassium palmitates and stearates increases the tendency of soaps to crack, while a high percentage of sodium or potassium oleates or resinates or soaps of acids below C_{14} decreases this tendency. The opinion is given that cracking, which is normally in the horizontal direction, is due to pencils of soap from sieve-plate not being compressed together in the finished cake, N. N. Godbole and J. S. Shukla, *Indian Soap J.* 10, 23-5.

Reverse Detergent

Reverse detergency, used here to mean removal of traces of water from metal surfaces, is achieved by rinsing the surface with a composition consisting of hydrocarbon oil in which is dissolved an oil-soluble amine salt of a product made by treating an alkylated naphthalene sulfonate with a coumarone-indene resin. When this rinse, because of prolonged use, no longer absorbs water, it can be regenerated by allowing it to stand, and withdrawing the water that separates out. W. H. Kirkpatrick and D. L. Wilson, to Visco Products Co. U.S. Patent No. 2,435,925.

Pure Oleic Acid

Polyunsaturated fatty acids are removed from oleic acid by heating one mol of the fatty acids with 2-10 mols of alkali at 280-310°C. This converts the polyunsaturated acids to acetic acid and saturated acid soaps, which can be removed by conventional methods after acidification. Substantially pure oleic acid is thus obtained. J. Ross, to Colgate-Palmolive-Peet Co. U.S. Patent No. 2,435, 159.

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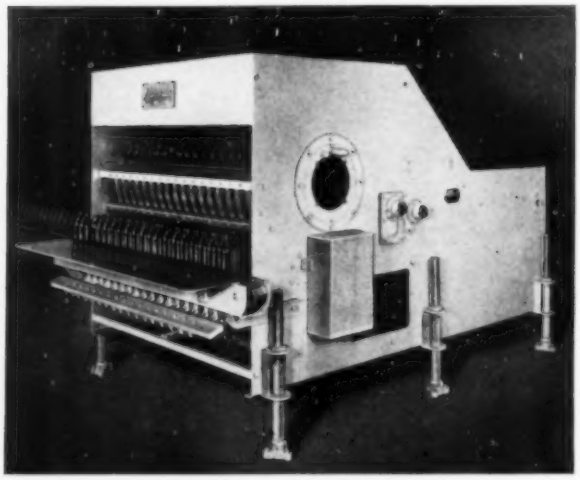

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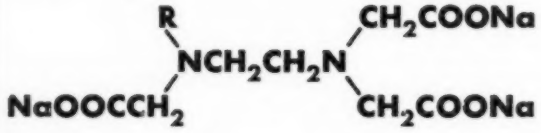

DEFINITION: a polyaminocarboxylic compound available either as sodium salt or purified free acid; a chelate forming compound capable of deionizing calcium, iron and other divalent or trivalent cations;

SYNONYMS: water softener; a non-hydrolyzable organic counterpart of the polyphosphates; a water soluble ion exchanger.

Uses: because of its ability to bind alkali earth and metal ions in a stable, non-ionized form, **SEQUESTRENE** has found uses as varied as: soap rancidity retardant . . . foam builder . . . liquid soap clarifier . . . milk stone, tooth tartar and calcium soap solvent . . . anti-oxidant . . . cuticle remover clarifier . . . ingredient in hard water bar soap, shampoos, scrub soaps, bath oils, shaving creams, etc.

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Pressure Saponification

Experimental saponification of fat stock under pressure in an autoclave was successful in Germany in 1937. The experimental procedure was converted to commercial practice with little change by use of an old piece of equipment for purification of fats in vacuo. A pressure saponifier of 30 cubic meters-content was used, and one twice as large was in the process of building when the war intervened. Soda ash was the saponifying agent, which dissolved in about five minutes. During the first 15 minutes of application of heat and pressure, evolution of carbon dioxide took place rapidly. After that the proportion of carbon dioxide in the steam fell rapidly until at the end of an hour it was less than 10 per cent.

Saponification proceeded very speedily The temperature and pressure remained much the same until the proportion of carbon dioxide reached a low level, when both temperature and pressure increased. Saponification was 98-100 per cent complete in 70-90 minutes; the total time consumed per charge was three hours. After saponification was complete, the contents of the pressure vessel were transferred to a regular soap kettle and the process finished. The first spent lye was 10-12 per cent. After four washings, the average concentration of glycerine was 5.5 per cent. The quality of the soap met all the requirements. Paste soap, toilet soap base, and powdered soap bases were all made by this process. The great advantage was in use of soda ash in place of caustic soda.

Six soap plants were using this method in Germany in 1938, but its extension was prevented by the war. Economy of heat was achieved and no smoking or sticking of the soap to the walls of the vessel occurred. The pressure vessel was made of steel. R. Fiala, *Seifen, Ole, Fette, Wasche* 74, 78-9 (1948). Ed. Note—This is the successor to *Seifensieder Ztg*, which was discontinued for 2½ years.

Fatty Acid Determination

The acids are liberated with sulfuric acid in a Gerber tube containing the sample and 1 ml. of amyl alcohol. After centrifuging and warming at 70°C., the units are read in the graduated portion of the tube. Multiplication by a factor gives the percentage of fatty acids in the soap. Only fifteen minutes are required for the determination. H. Wachsmuth and R. Robeyns, *J. Pharm. Belg.* 2, 289-91; through Chem. Abs.

Glycerol Extraction

Glycerol is completely miscible with either water or *tert*-amyl alcohol, but mixtures of glycerol, the alcohol and water form two liquid phases. The composition of each phase depends on temperature and the relative proportions of glycerol and the alcohol. The method makes possible obtaining a neutral, substantially salt-free, 98-99 per cent glycerol J. C. Elgin to Colgate-Palmolive-Peet Co. U.S. Patent No. 2,436,209.

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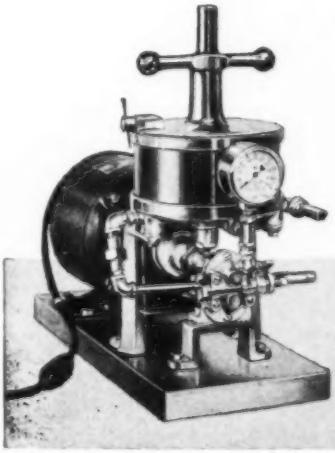

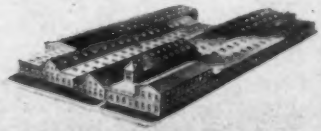

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Saponifying Agents

Mixtures of fats and resin acids with nonsaponifiable matter are separated by saponifying with a metal or a metal compound which forms soaps of low melting point with the acids in the mixture. The non-saponifiable material is then removed by distillation, and the remaining soap is split to free the acids. Zinc and zinc oxide are suitable saponifying agents. The saponification preferably takes place in the presence of water but at such a high temperature that the water is driven off. E. E. Olsen, to Lilejeholmens Stearinfabriks Atiebolag. Swedish Patent No. 119,359.

Products of Autoxidation

The first products of autoxidation of oleic and linoleic acids are hydroperoxides. The products of decomposition of these hydroperoxides appear to be alpha,beta-unsaturated carbonyl compounds, one of which is 2-undecenal. C. E. Swift, F. G. Dollear, L. E. Brown, and R. T. O'Connor, *J. Am. Oil Chemists' Soc.* 25, 39-40 (1948).

Indian Essential Oils

Besides sandalwood, Agar wood gives an oil suitable for perfume manufacture for export from India. Nagkeshor flowers furnish an oil very suitable for use in soap perfume. Many other oil-bearing materials grow wild in India and now go to waste, but could be utilized by setting up factories in different parts of the country. For proper development of these resources, scientific study and control needs to be established in central factories. N. Ch. Deb, *Indian Soap J.* 13, 189-94 (1948).

Iodine Number

Determination of the iodine number of fats containing conjugated double bonds should not be carried out by the Kaufman method. It was found that this method gives results much lower than those obtained with Hanus' solution. P. Savary and C. Ferrari, *Oleagineux* 3, 134-5 (1948).

Soap Action on Skin

Patch tests on 300 people showed that sodium laurate, myristate, and oleate frequently cause definite erythema, while palmitate and stearate are relatively nonirritating to the skin. A cake detergent was developed made primarily from stearic, palmitic, and sulfato-octadecanoic acids, adjusted to pH 8.5 This proved to be nonirritating to the skin, proved both by patch tests and by clinical investigations. C. G. Lane and I. H. Blank, *Am. Perfumer* 51, 357-61 (1948).

Autoxidation Study

In a study of the autoxidation of methyl linoleate, the oxidation products were separated by means of chromatographic adsorption on sodium aluminum silicate. It was found possible to separate primary oxidation products from secondary products, and to concentrate them, a method which should prove a great aid to futher study of the reactions occurring during fat oxidation. L. R. Dugan, B. W. Beadle, and A. S. Henick, *J. Am. Oil Chemists' Soc.* 25, 153-7 (1948).

New POLISHED CHROME POWDERED SOAP DISPENSER by Federal

FEATURES: Wide-opening top for easy filling . . . Cover anchored to dispenser . . . Small non-clog push up type discharge valve with agitator; prevents packing and insures smooth constant quantity discharge . . . Standard heavy brackets for direct mounting to wall or horizontal pipe.

APPLICATIONS: Industrial Plants, Public Buildings, Office Buildings, Schools, Theaters, Stores, Gasoline Stations—also a practical convenience for the home laundry and kitchen.

MATERIALS: Polished chrome brass container . . . High luster finish . . . Metal valve mechanism . . . Stainless steel spring.

SPECIFICATIONS: Size—9⅜" high x 4" diameter. Weight—2 lbs. 3½ oz. (including bracket). Capacity—1¼ qts. (liquid measure).

NAME PLATES: Individual name plates designed, furnished, and mounted. Quotations on request.

PACKING: Standard packing—1 unit to individual reshipper carton (weight 2 lbs. 9 oz.), repacked 1 doz. to shipping case.

(We do not sell soap powder)

FEDERAL TOOL CORP.
400 N. LEAVITT STREET, CHICAGO 12, ILL.

sentence warn the consumer against excess inhalation of mist, there certainly would be confusion and sales resistance hard to overcome.

Let's be realistic. Most of us skim over directions and look for the part that tells us how much to use. We then use twice as much to be sure to get results. If instructions say six to eight seconds, the average person will use it 10-15 seconds. If we fill the room with mist, half of a can of aerosol would be wasted on a few flies or mosquitoes and then the loss of a customer because he finds it too expensive to buy again.

Surveys indicate that when Mr. and Mrs. Consumer are annoyed by a few flying insects they would hit them with aerosol spray and watch them drop and die. With this conservative application and following the time limit or directions for cockroaches and other types of crawling insects, the average home owner who has used aerosols has learned of their economy and ease of application.

In conclusion, the time factor should continue to be included in directions for use. Mist or fog is vague and variable, whereas a second of time is still 1/60 of a minute. The industry, however, should label their products to conform with spray-rate, particle size and effectiveness of formulation. No set or general rule can be established that would include all of these variables."

Continuation of the time factor on the label was also recommended by H. E. Peterson of Continental Filling Corp., Danville, Ill. He said that the valves that are being used on aerosol dispensers today insure a uniform delivery rate. Some, however, may vary for specific formulations. But if this is so, it can be stated on the label.

Another question was: " 'Where the same company markets both an aerosol package and a regular household insect spray, should the recommendations cover the same group of insects on both types of insecticides. Or should the label recommendations for use differ so that they do not overlap?' Will you give us your views on these questions?" The following statement was read by A. C. Miller of Gulf Oil Co.

"It seems to me that for a successful operation based on repeat sales the direction label for any household insecticide, regardless of type, should place in the consumer's hands information that will permit effective and economical use of the product. With this in mind and from the viewpoint of a company offering both aerosol and regular household insect sprays, it would seem that recommendations should overlap and cover the same group of insects on both types of insecticide products in so far as effective and economical results can be obtained. Certainly it would be difficult to avoid overlapping entirely since the more common household insects—flies, mosquitoes, roaches, ants, and moths—are relatively few in number; and it would be a faulty assumption, even from the most optimistic sales viewpoint, to assume that your customers will have available both your aerosol and regular household spray.

In a recent check made on label claims of eight competitive low pressure bombs, it was interesting to note that recommendations were made for only five and six insects by the two companies offering a full line of liquid sprays, while six companies offering only aerosols, or having a small line of liquid products, listed recommendations for nine to fifteen household insects.

While the effectiveness of a given insecticide—be it aerosol or the regular liquid spray—for controlling a given insect may be controversial, consideration of aerosol recommendations for bedbugs are of interest. We are all aware that ordinary base oil if brought in contact with bedbugs will give almost instantaneous death. However, it was not until the advent of DDT that a really effective bedbug insecticide was available for consumer use. Granting that a conventional aerosol containing 2.0% DDT along with 0.2% activated pyrethrins is highly effective as a direct contact treatment against begbugs, it is the DDT residual effect that sets this product aside from the general run of prewar liquid sprays.

Assuming a 2.0% DDT content of the aerosol and basing our calculations on a 12 ounce unit costing $1.00, we find the customer receives 0.24 ounces of DDT for his money. Calculations on a regular household type liquid spray containing 5.0% DDT and retailing for 55c a quart show the consumer receives 2.6 ounces of DDT for $1.00, or over ten times as much. It would thus seem that for best consumer satisfaction and economy DDT in the form of a residual-type spray could well be recommended over the conventional aerosol formulation against bedbugs.

A similar point could be made in the moth use of aerosols as contrasted with liquid sprays. Here again the primary interest is in a long lasting residual deposit of DDT. Furthermore, it is known that in many cases aerosol formulations when improperly used may stain fabrics.

Obviously, suitably formulated aerosol or regular household sprays if properly employed will control flies, mosquitoes, and certain other insects, and result in consumer satisfaction and the all important accompanying repeat sales. There can be little doubt that in the case of aerosols the consumer is paying a premium for a convenient type of application. The decision as to whether this convenience is worth the added cost rests with the consumer.

In summary, I feel that recommendations for aerosols and liquid sprays should cover the same group of insects in so far as effective and economical use can be furnished to the customer. Nothing would appear to be gained by a manufacturer offering only an aerosol product in making recommendations that may lead to dissatisfaction on the part of the customer.

The next question read: " 'Is it good economics or good merchandising to market low-pressure aerosols which are only adequate at most for treating 75,000 cubic feet per package when it is possible and feasible to supply packages at only slightly higher cost which will be effective for treating at least 125,000 cubic feet?'

E. N. Clarke, Regal Chemical Corp., Brooklyn, replied that is too early as yet to tell.

The final question was " 'The use of 'Parathion' in household insecticides has been the subject of a recent dispute. A leading government authority stated that this chemical should not be used in products for the household field. The atmosphere should be cleared in respect to this product. Will you give your views on this statement?"

The answer given by Melvin Goldberg of Geigy was that the product is not only hazardous, but that other products do the work better and cheaper.

A report on "The Rat Control Program" presented next by Harold A. Noble of Penick & Co., New York, begins on another page of this issue.

The concluding feature on the meeting program, June 16, was a "Pictorial Presentation of Joint United States-Canadian Biting Fly Studies at Churchill." Dr. C. R. Twin, household and medical entomology unit, Department of Agriculture, Ottawa, Canada, gave the commentary accompanying the slide pictures.

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SANITARY PRODUCTS

A SECTION OF SOAP

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The feeling that the dearth of the usual household insects during the past two seasons,—flies mosquitos, roaches, gnats,—would average itself out by heavier infestations this year and next may hit close to fact. That the low state of household insecticide demand has been attributable to reduced insect populations in 1946 and 1947,—and not to the prolonged effectiveness of some of the newer insecticides, notably DDT,—now seems to be a more or less generally accepted view. An active retail demand during the next two months would do wonders to clear the decks for better business for insecticide manufacturers in 1949.

DURING the symposium on insecticides at the recent NAIDM meeting, the problem of gratuitous insecticide spraying by state, county and local public health officials was brought up, but left hanging in mid-air. In short, no conclusion was reached as to its benefits or harm to the industry and local dealers. Investigations by two or three insecticide producers brought diverse conclusions. In some instances where public spraying was done, local retail sales of insecticides increased. In others, they decreased. The contentions of different manufacturers were that public spraying helped the long-range consumption of insecticides by teaching insect consciousness, and on the other hand, that it hurt legitimate manufacturers and dealers by taking away their current business.

After discussing the problem with a number of people in the insecticide industry, we are inclined to retreat from our previous stand that all public health spray projects are damaging to the welfare of the industry. We feel that the findings of one manufacturer in certain localities that his sales increased in the months following public health spraying of homes, barns, public buildings, etc., might indicate the worth of investigating the subject further. But irrespective of such findings, we believe in all fairness that any business for such spray materials should not circumvent the channels of the trade, that local processors and dealers should be the medium through which the materials are purchased in every case when and if they may be bought and used.

LABELING of "every garbage can with skull and crossbones to arouse the nation against one of the most potentially dangerous public enemies" was proposed by an advertising man recently at the National Sanitation Clinic, Ann Arbor, Mich. Everything is becoming a peril in the words of speakers at conventions and luncheons. Now, the "peril of the garbage can" is thrust upon us,—and we want to take this occasion to tab it as so much mush. Nothing prevents proper washing, disinfecting and deodorizing of garbage cans.

As for labeling garbage cans with the skull and crossbones, this is just plain nonsense. This poison symbol should be restricted for use on cyanide, arsenic, thallium, and the like and should not be cheapened and weakened every time some crackpot gets an idea. Let's not confuse true danger with something which violates our esthetic senses.

sentence warn the consumer against excess inhalation of mist, there certainly would be confusion and sales resistance hard to overcome.

Let's be realistic. Most of us skim over directions and look for the part that tells us how much to use. We then use twice as much to be sure to get results. If instructions say six to eight seconds, the average person will use it 10-15 seconds. If we fill the room with mist, half of a can of aerosol would be wasted on a few flies or mosquitoes and then the loss of a customer because he finds it too expensive to buy again.

Surveys indicate that when Mr. and Mrs. Consumer are annoyed by a few flying insects they would hit them with aerosol spray and watch them drop and die. With this conservative application and following the time limit or directions for cockroaches and other types of crawling insects, the average home owner who has used aerosols has learned of their economy and ease of application.

In conclusion, the time factor should continue to be included in directions for use. Mist or fog is vague and variable, whereas a second of time is still 1/60 of a minute. The industry, however, should label their products to conform with spray-rate, particle size and effectiveness of formulation. No set or general rule can be established that would include all of these variables."

Continuation of the time factor on the label was also recommended by H. E. Peterson of Continental Filling Corp., Danville, Ill. He said that the valves that are being used on aerosol dispensers today insure a uniform delivery rate. Some, however, may vary for specific formulations. But if this is so, it can be stated on the label.

Another question was: " 'Where the same company markets both an aerosol package and a regular household insect spray, should the recommendations cover the same group of insects on both types of insecticides. Or should the label recommendations for use differ so that they do not overlap?' Will you give us your views on these questions?" The following statement was read by A. C. Miller of Gulf Oil Co.

"It seems to me that for a successful operation based on repeat sales the direction label for any household insecticide, regardless of type, should place in the consumer's hands information that will permit effective and economical use of the product. With this in mind and from the viewpoint of a company offering both aerosol and regular household insect sprays, it would seem that recommendations should overlap and cover the same group of insects on both types of insecticide products in so far as effective and economical results can be obtained. Certainly it would be difficult to avoid overlapping entirely since the more common household insects—flies, mosquitoes, roaches, ants, and moths—are relatively few in number; and it would be a faulty assumption, even from the most optimistic sales viewpoint, to assume that your customers will have available both your aerosol and regular household spray.

In a recent check made on label claims of eight competitive low pressure bombs, it was interesting to note that recommendations were made for only five and six insects by the two companies offering a full line of liquid sprays, while six companies offering only aerosols, or having a small line of liquid products, listed recommendations for nine to fifteen household insects.

While the effectiveness of a given insecticide—be it aerosol or the regular liquid spray—for controlling a given insect may be controversial, consideration of aerosol recommendations for bedbugs are of interest. We are all aware that ordinary base oil if brought in contact with bedbugs will give almost instantaneous death. However, it was not until the advent of DDT that a really effective bedbug insecticide was available for consumer use. Granting that a conventional aerosol containing 2.0% DDT along with 0.2% activated pyrethrins is highly effective as a direct contact treatment against bedbugs, it is the DDT residual effect that sets this product aside from the general run of prewar liquid sprays.

Assuming a 2.0% DDT content of the aerosol and basing our calculations on a 12 ounce unit costing $1.00, we find the customer receives 0.24 ounces of DDT for his money. Calculations on a regular household type liquid spray containing 5.0% DDT and retailing for 55c a quart show the consumer receives 2.6 ounces of DDT for $1.00, or over ten times as much. It would thus seem that for best consumer satisfaction and economy DDT in the form of a residual-type spray could well be recommended over the conventional aerosol formulation against bedbugs.

A similar point could be made in the moth use of aerosols as contrasted with liquid sprays. Here again the primary interest is in a long lasting residual deposit of DDT. Furthermore, it is known that in many cases aerosol formulations when improperly used may stain fabrics.

Obviously, suitably formulated aerosol or regular household sprays if properly employed will control flies, mosquitoes, and certain other insects, and result in consumer satisfaction and the all important accompanying repeat sales. There can be little doubt that in the case of aerosols the consumer is paying a premium for a convenient type of application. The decision as to whether this convenience is worth the added cost rests with the consumer.

In summary, I feel that recommendations for aerosols and liquid sprays should cover the same group of insects in so far as effective and economical use can be furnished to the customer. Nothing would appear to be gained by a manufacturer offering only an aerosol product in making recommendations that may lead to dissatisfaction on the part of the customer.

The next question read: " 'Is it good economics or good merchandising to market low-pressure aerosols which are only adequate at most for treating 75,000 cubic feet per package when it is possible and feasible to supply packages at only slightly higher cost which will be effective for treating at least 125,000 cubic feet?'

E. N. Clarke, Regal Chemical Corp., Brooklyn, replied that is too early as yet to tell.

The final question was " 'The use of 'Parathion' in household insecticides has been the subject of a recent dispute. A leading government authority stated that this chemical should not be used in products for the household field. The atmosphere should be cleared in respect to this product. Will you give your views on this statement?"

The answer given by Melvin Goldberg of Geigy was that the product is not only hazardous, but that other products do the work better and cheaper.

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Guest Editorial written especially for this issue of Soap and Sanitary Chemicals.

In Self Defense

by

Gordon M. Baird

THE latest and one of the most pressing problems facing the manufacturer of sanitation products is the competition from dealers attempting to make their own sanitary supplies. This fact should in no way be underestimated as a definite problem for the manufacturers who have devoted years of effort and expended considerable sums of money to develop new products and standardize the old ones, constantly striving to offer the sanitary supply and janitor supply houses the best materials available. The manufacturer has also spent money and time to develop tests to prove to the customer the best method of application and the best products for each special use. All of these products are needed. The advancements in quality and use have not been developed over night but only after years of patient and strenuous research as well as experience.

It is true that in many publications today, formulae are readily available to anyone, but something that cannot be bought or sold is the years of experience devoted to the manufacturing of sanitation products; in other words the "know how." It is regrettable that in the present day this "know how" is being overlooked by the many wholesalers and janitor supply houses. It is taken for granted that once they have the formulae for products, the "know how" will come within a few weeks. What a mistake this is.

How often does a sales representative of a manufacturing company which has devoted its entire years of business to promoting quality products, hear the story from the janitor supply house—"No, nothing today, we are making our own now." Without argument, the janitor supply house has every right in the world to start manufacturing its own products, but let us look at it also from a cost angle. The manufacturing is often done first on a small scale in the back of a shop; time and money are spent on this, and

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Trends in Consumer Demand for

HOUSEHOLD SANITARY PRODUCTS

By Ephraim Freedman *
Macy's

MANUFACTURERS of insecticides, disinfectants and allied sanitary products are continuously concerned with prosecuting both an offensive and defensive war against illness, disease and property damage occasioned by the onslaught of microorganisms and macroorganisms, by the elements, by dust and filth and grime and disease. The industry is engaged in constructive enterprises insofar as man is concerned and without its valuable contributions to better living, man would certainly fare ill.

How these contributions are being currently viewed by the public can perhaps best be evaluated by a study of consumer buying trends, reviewing the various products that the industry offers the public and noting what the consumer reaction to those products has been. Also, it may be wise to explore some of the reasons for these trends and perhaps, to see how the industry can help the public make more intelligent use of its products.

Insecticides

Take insecticides as an example. When DDT sprays first came into the market, the immediate wide-spread public demand disclosed the then current need for a relatively harmless yet prolonged residual contact spray to eliminate those insects which at times infest the home. It was not long thereafter when aerosols put in an appearance. These too met with immediate public demand. At first, they were terrifically over-rated because the public was led to believe that the aerosols were capable of killing all insects. Because tests conducted in tents, barracks and barns indicated that flies, gnats and mosquitoes could be killed off in quick order and that the sprayed quarters would thereafter enjoy a continuing period of immunity, the public came to believe that a similar application in the home would also result in the immediate and in the prolonged elimination of roaches and bedbugs as well.

The public is gradually learning otherwise. The observant consumer has come to realize the necessity for modifying the application of aerosols if insect-life is to be driven or eliminated from the home. As a result of consumer experience with the aerosols, there has been a decrease in demand for conventional fly, ant and roach sprays. The fly spray manufacturer in particular has perhaps been hit worst of all.

I mentioned before, the use of aerosols for roaches. Because it is important to get enough residual insecticides into cracks and crevices to prevent their serving as harborages as well as to destroy insect life, it would seem that the use of the aerosols for this purpose is contra-indicated. First of all, a more lethal dose can be administered at less expense with either powder or liquid. Secondly, there is, less waste of insecticide. It would seem therefore that liquids or powders containing residual killing agents would be more effective. While the original aerosol bombs contained DDT, a number of bombs currently on sale contain no DDT. The public apparently is not aware of the difference in formulation of the contents of the various bombs. Consumers have come to believe that an aerosol bomb means a package of death-dealing insecticide with prolonged killing power. When the customer's attention is directed to the formulation and its significance, she tends to shy away from the non-DDT carrying products.

One of the newer aerosols contains Chlordane in addition to DDT which should add to the effectiveness of the product in dealing with hard-bodied insects.

Aerosols Confused

THE aerosol market at present appears to be quite confused. High-pressure bombs are available to retail at $1.50 or less, because of various close-outs, or discontinuance of manufacture. Low-pressure bombs, selling at less than $1.00 are not in too great a demand, perhaps because the container is usually shaped like a beer can—certainly not like a bomb. Perhaps this creates doubt in the customer's mind as to the reliability and efficiency of the product. Given time, and education of the public, however, the low-pressure container will most likely supplant the heavier and costlier high-pressure bomb.

Inquiry disclosed relatively few complaints regarding aerosol bombs. Mechanical failures, chiefly valve trouble, have been the major source. Sometimes the customer unscrews the valve too far, causing the contents of the bomb to erupt. The manual operation usually employed to replace the valve, has resulted in burns. There have been practically no complaints regarding allergy or sensitivity due to the use of aerosol bombs. There have been a normal number of complaints regarding the efficiency of the aerosol. Some of these complaints arise from the fact that flies are seen flying around shortly after the spray has been used. The public is now becoming more accustomed to the aero-

* Before the Natl. Assn. of Insecticide and Disinfectant Mfrs., Spring Lake, N. J., June 14, 1948.

sols, however, and is learning how to use them more effectively.

Moth Prevention

The demand for moth killers, preventives and proofers continues. The product in greatest demand is paradichlorobenzene. It is used as a preventive during storage, and as a killing agent. Many people vaporize it in their closets. The dollar volume of para is up, but the unit volume is not. Some of the para crystals are selling at 20c. per pound less than competitive products.

There are no complaints regarding the efficiency of para, but there is an occasional complaint of staining of garments or reddening of dyed furs. We have not been able to duplicate the stains or discolorations with the para in question. Gum, or synthetic camphor, for which there once was a fair demand is seldom asked for. Para has replaced it.

Silicofluorides

Under this title, there is one nationally advertised product, the sale of which seems to go on at a steady pace year after year. It is advertised as strongly as ever and is the only mothproofer that seems capable of being sold with any success. Seldom is a complaint received concerning it. During the past year we have had no complaints.

Last year a large company brought out a competitive product which was reported as comparing very favorably with the former. We understand however, that the product was recalled at the end of the season. Another durable mothproofer, featuring DDT as one of the ingredients, did not survive the spring season of '47.

A number of attempts have been made to market dry-cleaners containing mothproofing agents. So far none of them have met with success. The reason should be quite obvious. Dry-cleaning at home is frequently a more expensive and a less satisfactory operation than dry-cleaning at a commercial establishment. Furthermore, dry-cleaning at home, and particularly in an apartment, is often a bothersome task.

While the demand for tar-paper continues, the sale of paper containing DDT is increasing. Tar bags however, are taking a real beating, since plastic film bags of polyethylene or vinyl have been found to be more practical and more durable. Also plastic film bags are not too expensive. Some vinyl bags are affected by para, others are not. This condition is undoubtedly due to the formulation of the vinyl. Polyethylene bags however, are impervious to the various moth products.

Cedar oil preparations are losing popularity. The term "Cedar" as applied to closets, paper or chests, no longer has the drawing power it once enjoyed.

Disinfectants

Disinfectants of the coal-tar type are in greatest demand. Pine oil disinfectants are less popular. The sale of these products has not been noticeably affected by the aerosol disinfectants and germicides which made their appearance several years ago. These aerosol germ-killers have had a rather short life and no one apparently, except their sponsors, has regretted their demise.

Deodorizers

The sale of deodorizers continues to be steady. The wick type deodorizers are preferred. Deodorizers which have to rely on manual operation are not readily saleable.

Floor Waxes

The story on floor waxes is pretty much the same as it was five years ago. The no-rubbing floor waxes continue to be in steady demand.

Furniture Polishes

The furniture polish business is pretty staple. Answering a demand for higher lustre, we've improved our formulation and are supplying an emulsion type polish of relatively high wax content.

Metal Polishes

We observe no important developments in the metal polish field, including silver polish. Occasionally we run across a silver polish containing cyanide. Every few years there is a revival of the old electrolytic type of silver polish. This is currently the case. How long it will last is problematical.

Some attempts have been made to market metal cleaners and polishes containing phosphoric acid. Phosphoric acid is an excellent rust remover—but it is not satisfactory as a polisher, even with the addition of a mild abrasive.

A new item has recently put in an appearance. It is referred to as a wax. Why, I don't know. It is an excellent window-cleaner and is cutting into the sale of some of the older window cleaners, and will probably also affect the sale of the electrolytic silver polishes. It appears to impart a thin film to the cleaned surface, thereby providing some measure of protection to the latter. However, it is more abrasive than some of the good silver polishes.

Cleaning & Spotting Fluids

The sale of cleaning fluid continues, with the naphthas enjoying the largest volume of business. Carbon tetrachloride products are sold only in small packages and we require them to carry adequate warnings as to directions for use. Spotting agents sell in small quantities, requiring continuous demonstrations to maintain volume. The same holds for rug and carpet cleaners.

Detergents

During the war, the soap shortage brought a number of soap substitutes onto the market. These consisted principally of mixtures of carbonates and phosphates. Later on some synthetic wetting agents were presented to the public. Both types sold in large quantities. Both types were claimed to be superior to soap on all counts. Sometimes the sponsors of some of these products became quite pugnacious when their claims were questioned.

Both types of products have great merit and for some uses are superior to soap. But a large segment of the public has decided and in many instances, I suspect rightfully so, that it prefers soap. The result is rapidly becoming apparent. During the past month a flood of these products has appeared for 10c. a pound

The director of the bureau of standards of the world's largest store reviews the merchandising of sanitary chemicals and gives some advice.

or less. Three weeks ago our buyer received five offerings of closeouts of various brands of detergents. Not carloads, but train-load lots are reported available for sale. I believe this unhealthy condition is due in great measure to the exaggerated claims made for the non-soap detergents and the subsequent consumer awakening to the falsity of these claims.

The carbonate-phosphate combinations, the synthetics and the soaps all have their own particular advantages and also their limitations. When these are made evident in the advertising and labeling of these products, the products themselves will come into their own, and their distribution and sale will become more stabilized.

Already, for example, the synthetic detergents appear to be more popular as automobile cleaners. They cut the dirt rapidly and they are readily rinsed off. Also the cars washed with the synthetic detergents do not seem to require wiping to dry without spotting. On the other hand, automatic dish-washers require the use of the carbonate or phosphate detergent. This type of detergent appears to be most suitable for dishes, glassware and particularly for pots and pans. Almost any detergent other than soap has to be demonstrated in order to be sold successfully.

Mildew Preventives

During the war years a number of attempts were made to market products to prevent mildew on fabrics and in closets, basements, etc. Also a number of dessicants appeared upon the market. Although this section of the country has experienced an overabundance of highly humid days this year, there has been, as yet, no great demand for mildew preventatives. This may be due to the fact that the temperatures thus far have been relatively low, and that the optimum temperature for most mold growths lies beteween 80° and 90°F. S. S. Block in "Mold & Mildew Control," a Bulletin of the Florida Engineering and Industrial Station, states "It has been shown that the minimum relative humidity supporting growth varies from 75 to 95%."

We are experiencing considerable difficulty with manufacturers of dessicants because of a difference of opinion as to the scope of the drying job to be done and the ability of the dessicants, in the size packages offered, to do that job. For example, one manufacturer bases his argument on the fact that the average relative humidity in the New York area from May to October 1947 was 67½% and the average temperature, 66.5° Fahrenheit.

Our position is this—One does not need dessicants in the home when the relative humidity is that low. But when the relative humidity reaches 85 to 90 or 95%—and stays there for several days—then is when the mold grows in the shoes and elsewhere about the home. Then is when a man-sized package is required to de-humidify the closets and basements. And then is when the itsy-bitsy containers of dessicant, are not sufficient to do the job. I have no quarrel with the use of dessicants in the home. I do however, disapprove of knowingly sending a boy on a man's errand.

Ozonators

Recently, while visiting our Housewares Dep't., I asked to be shown some ozonators. I found two of them, good looking small compact units, marked down from $19.94 to $9.94 because there is no demand for ozonators.

Germicidal Lamps

When I asked for a germicidal lamp, I was shown the one and only sterilizing fixture and was assured there were absolutely no takers for it. The answer should be quite obvious that in the normal household there is no demand for either ozonators or germicidal lamps.

Rug and carpet cleaners, silver and brass and furniture polishes, paint removers, spot removers, scratch eradicators—all sorts of special products for maintaining the home and its belongings, are being sold in our housewares department. The sale of many of these items is maintained only as a result of demonstrations, with the demonstrators vying with each other to see who can draw the largest crowd. Now and then we have to tone them down, both as to their decibel output and as to their claims.

The sale of sanitary products keeps on at a merry pace. Actually, manufacturers are doing a fine job. It is only under the stress of competition as when DDT sprays first came upon the market, or when new laws, rules or regulations come into existence, that some firms provide us with just cause for complaint.

Labeling Changes

Our buyers have been notified that on and after June 25th, we will not permit acceptance of any shipments of insecticides and fungicides which are not labeled in compliance with the new Insecticide Act, or with such rules and regulations pertaining to that Act, or if the products are not registered when registration is required by law.

While insecticides, fungicides and disinfectants usually contain considerable educational and informative data for consumers, many other products produced by your industry are found to be wanting in this respect. Also some of the information appearing on labels is not factual. May I suggest therefore, that more attention be given to the development of labels which carry information disclosing:—

What the article is made of;
Its strength, concentration or potency;
What it will do and if essential, what it will not do;
Directions for its use;

(*Turn to Page* 153)

CLICKITY CLACK

WOW! *what a beating those pretty little heels give a floor!*

Ask your customers to put one of Candy's floor waxes between those heels and the floor . . . then, they can forget their expensive floor and again appreciate that

Beauty SPEAKS FOR ITSELF

Remember it's on *all* floors that Candy's waxes really shine . . . on *your* customer's floors a sale is surely made.

Try one or try all three; Candy Supreme, Candy DeLuxe or Bright Beauty. The quality that forces repeat sales to those who want and need the best, is yours to wrap up in your own label.*

WRITE TODAY FOR SAMPLES

*. . . We won't compete with you for the consumer money —it is all yours; except for Chicago experimental accounts, we sell only to Distributors never direct to the consuming trade. And, it's been that way for years!

Wax Specialists for over 55 years

Candy & Company, Inc.

2515 W. 35th ST., CHICAGO

MANUFACTURERS OF PREPARED PASTE WAX, SPIRIT LIQUID PREPARED WAXES, POWDERED DANCE FLOOR WAX, CREAM FURNITURE POLISH

INSECTICIDES

Are Major Topic of Discussion at NAIDM Mid-Year Meeting in Spring Lake. Wax Definitions Studied. Attendance put at 260.

A DIVERSIFIED program, with the main emphasis on insecticides, featured the 34th mid-year meeting of the National Association of Insecticide and Disinfectant Manufacturers, held June 14-16, at the Monmouth Hotel, Spring Lake, N. J. Registration for the meeting was approximately 260.

The program, which was arranged to allow for general discussions in the mornings, with afternoons open for committee meetings and small group discussions of industry problems, was in charge of Friar Thompson of R. J. Prentiss & Co., New York. The first general session was presided over by Gordon M. Baird of Baird & McGuire, Inc., Holbrook, Mass., president of the Association. He was introduced by Leonard J. Oppenheimer, of West Disinfecting Co., Long Island City, N. Y., first vice-president. In his welcoming address, Mr. Baird reviewed his first six months as president and thanked the officers and directors and those who had participated in the affairs of the Association for their cooperation.

Mr. Baird was followed by H. W. Hamilton, of H. W Hamilton Co., New York, secretary, who in presenting his report, which was published in the June issue of *Soap & Sanitary Chemicals*, read the text of a letter he presented before the Association of Economic Poisons Control Officials' Committe on a Uniform State Law, meeting in Los Angeles on June 5. Mr. Hamilton's letter urged that the present model or uniform state insecticide and fungicide bill not be changed. However, if changes or revisions are contemplated, he recommended the "entire text should be opened for complete revision and review" since suggested revisions change the "spirit of the whole model act." The statement of Mr. Hamilton before the Association of Economic Poisons Control Officials, which follows, was supported in a resolution adopted unanimously.

"THE Association which I represent numbers over two hundred companies manufacturing household and industrial disinfectants, insecticides, and sanitary products, marketed largely on a national basis. I request permission to read these brief comments, and to have them formally written into the minutes of this meeting. I shall cooperate in any discussions at this meeting.

"The model or uniform state insecticide and fungicide bill was prepared only after many long months of careful consideration by qualified men who are versed in sciences, commerce, law enforcement, and law formulation. It is a fair and enforceable document, which when enacted into law is just.

"Now it is proposed to offer suggested revisions which definitely change the spirit of the whole model act. If this is to be done, then it is our opinion that the entire text should be opened for complete revision and review. It is not possible to try to revise one portion without generally affecting its entirety. It is sincerely believed that the new Federal Act, the Uniform State Act and the strong enforcement programs in many of the states have been secured partly as a result of the willing cooperation of the economic poisons industry. This cooperation has been extended by our industry in good faith in the belief that it would result in efficient low cost administration of these acts with the maximum cooperation between federal and state officials and with the manufacturer in recognition of his problems. The adoption of the amendments proposed would negative these assumptions and again place on this industry the obligation and burden of actively opposing the unreasonable costs and restrictions inherent in these legislative proposals.

"Now taking up the resolutions submitted for consideration.

'(a) To include larvacides and ovicides.'

No objection can be seen to including larvacides and ovicides. It appears known that since larvae and ova are a part of the life cycle of insects these are pretty well covered in the present proposal.

'(b) By deleting the alternate provision that permits the registration of the name of each active ingredient and the name and the total percentage of each of the inert ingredients.'

"What useful purpose is served by this declaration of total percentages of active ingredients? The manufacturer gives up his trade secrets to the public, and no good purpose is served. The food we eat, the proprietary medications we take, the cosmetics we use, require no such declaration on the package. Industry compromised and agreed to go along with some basis substantially as that in the Food, Drug and Cosmetic Act as applied to drugs. It agreed to file its formulas with the proper state authorities, if desired. As far as the National Association of Insecticide and Disinfectant Manufacturers is concerned we are against full formula disclosure on labels because (1) it is a disclosure of a company's stock in trade; (2) it is not required by the public but is largely a device of chemists, entomologists, and others to learn easily what exactly is in the product for their own purposes; (3) even when on the label, only a very few understand the meaning of the technical analytical statement.

'(c) By deleting that part of the bill that permits an economic poison registered with the Federal Government to enter the trade channels of the state without registration in that state.'

"This brings us to registration fees. When 48 states and 3 territories get laws of this type, all requiring registration fees, the annual cost per product (and clerical expenses of filing) is going to be large. Small companies will find it impossible to distribute nationally. Many states will find only a few products available because the volume in the state is low. Possibly, some of the best products will not be offered. Already some companies have told me that if certain states insist on registration of their product, they will reluctantly be forced to withdraw these products from sale in those states. These state fees and regis-

trations on an annual basis are rapidly building up trade barriers and are thereby tending to restrain trade and raise prices by increasing costs and diminishing competition. Trade barriers based on state boundaries certainly are to be avoided. We believe that eventually one registration of a product in national commerce is sufficient. Many states have consumer sales taxes. Ultimately in those states every item sold bears a sales tax either collected by the manufacturer or the distributor. In addition, the manufacturer coming under the act about which we are talking, must pay a further tax which is called registration fee. As it is, the registration costs go into the total costs of each product and the people of all states (and a few foreign countries) have to pay higher prices. In states having sales taxes, the public certainly gets double taxation. Something must be done about these registration fees and their frequency. We believe the clause in the model bill should remain as it is.

'(d) By deleting that part of the bill which permits economic poisons to be registered under protest and sold during the period in which experimental trials are conducted.'

"Industry is often far in advance of general practising chemists, biologists, entomologists, and other applied scientists. In industry today there are combined skills of great worth. Often the value of the earning power of a development of extreme merit depends on rapid marketing and commercialization. It follows, therefore, that instances may arise where the enforcement official does not have the data which the industry has. It might take the state a year or more to develop the corroborating facts. Industry accepts a penalty if it chooses to force the registration, because it will not be done without thought—serious thought. In any case, it is well understood that registration does not in itself signify endorsement or approval, and can be revoked at any time. Here is a case of a manufacturer having some small right and risking much to exercise that right. Should he not have the privilege of 'registration under protest' if he is sure of his ground and willing to risk the penalties if he is wrong? We wish also to point out that any state official under the present Uniform State Law can prevent the marketing of any economic poison which has been registered under protest prior to court determination through seizure or, if necessary, injunction proceedings. The registration of an article under protest would not make it immune to seizure. Under these circumstances, there should certainly be no objection to a provision granting the right of court review of an administrative determination which would otherwise preclude a product from the possibility of being marketed.

'It has also been suggested that SECTION 3a (1) be modified to provide that when the commissioner in his discretion permits a change in labeling or formula of an economic poison, such change shall not lower the quality of the product.'

"We believe no change should be made in this Section. Shortages of materials or extravagantly increased costs may force formula changes which will do the work of the former product with only debatable inferior qualities. We believe the administration officers are given sufficient power to act in the present form.

"Our Association represents a substantial and growing industry although representing a smaller dollar volume, sells its products to more individual people, over a wider area, in more separate packages than that represented by many other groups. Our products make for cleaner living conditions and greater freedom from insect annoyances which all add up to better health. Restrain this trade, increase these costs, and there will be reduced sales, and the resultant general ill effects on the health and happiness of people in all walks of life. Laws are made for the protection and welfare of the people of this country. We are for just, enforceable laws. We have assisted, and will continue to assist, in the enactment and enforement of laws affecting our industry. Laws should not be burdens on any one. These insecticide, fungicide, and rodenticide laws are rapidly tending to become intolerable, tend to develop restraint of trade, and are causing chaos.

'This written statement has been reviewed by our counsel, legislative committee, and executive committee.

"We thank the Association of Economic Poison Control Officials for forming this committee and offering us the opportunity to present our views.

"I shall be happy to enter into any discussions that follow."

Ephraim G. Freedman, director of the bureau of standards of R. H. Macy & Co., New York, spoke on "Trends in Consumer Demand for Household Products in the Sanitary Field." Mr Freedman, whose paper appears in full elsewhere in this issue, reviewed various products in the field and the reaction of the public to these products. He observed a decrease in demand for conventional fly and roach sprays as a result of the introduction of aerosols. Mr. Freedman then went on to list a number of products in the sanitary chemical field and reported on their present-day market position.

John D. Conner, Washington representative for NAIDM, in an off-the-record talk traced the legislative and judicial background of the recent U. S. Supreme Court decision in the so-called "Cement Case" on base point pricing systems.

The final speaker of the first day's session, Edward C. Bursk, editor of the *Harvard Business Review*, spoke on "Marketing a New Sanitary Chemical." Mr. Bursk, whose presentation took the form of a marketing analysis, laid particular stress on product analysis, price analysis and promotion analysis. In product analysis, Mr. Bursk recommended that manufacturers ask themselves the question: "How well is the product adjusted to the market?" If the product is a new one, its marketing approach will be entirely different from that of a product which is known and understood by the consuming public. In the case of the familiar product, the job is mainly a "selective one—that of getting the market to buy your product rather than a competing brand. . . If the product is not known and understood, however, then the marketing job is going to be a primary one—that of putting over the general nature of the product itself rather than your own particular brand."

A second consideration in marketing a product is whether it "'lends itself to the same kind of selling effort, the same channels of trade, etc. as other items in your line." Although a product may succeed if it does not fit into the rest of the line, its cost of distribution will be higher than a

PRIZE DONORS

Prizes for the golf and quoits winners, as well as a group of door prizes drawn at the dinner were donated by a group of associate members and others. Prize donors included the following firms:

U. S. Industrial Chemicals, Inc., Niagara Alkali Company, S. B. Penick & Co., Rohm & Haas, Orbis Products, Van Ameringen-Haebler, Inc., Sprayer Corp. of America, H. D. Hudson Mfg. Co., Geigy Co. Inc., Atlas Powder Co., Dobbins Mfg. Co., Furst McNess Co., Davies-Young Soap Co., Lowell Mfg. Co., John Powell & Co., R. J. Prentiss, Federal Varnish Co., Soap & Sanitary Chemicals, Reilly Tar & Chemical Co., Velsicol Corp., Koppers Co. Inc., Continental Filling Corp., and Gordon M. Baird, President of NAIDM.

product whose charactertistics are more in keeping with other items in the line or methods of merchandising these items.

Choice of a package design—all-important for retail selling—must be based on moving goods rather than on the aesthetic value of the package. Similarly, the choice of the right product name is important in the success of a product. The real criterion here is whether the name or package causes the prospective customer to buy.

In establishing the price of an article these three questions should be asked and in the following order: "1.) What quantities will the market take at various prices,—of course considering what is now on the market? 2.) What are my direct manufacturing costs per unit?, and 3.) At which price —figuring quantity times the margin above direct costs will I get the maximum contribution to overhead?"

On promotion analysis, Mr. Bursk stated that the choice of emphasis might be put on advertising, including direct mail, or on personal selling. In connection with the use of consumer advertising, the following questions might be considered: "(1) Is the possible margin of profit sufficient to support a program of a size to have real impact? (2) Shall I try to push the product through the channels of trade by advertising—or to pull it through by influencing customers. (3) Shall I try to get the consumer to recognize and accept the product when it is presented to him—either by point-of-purchase display or on the recommendation of the retail sales clerk—or shall I try to get the consumer himself to ask for the product? (4) As a guide to answering the first three questions, how strongly does my product have any or all of the characteristics which may make the more expensive advertising effort worth while, because it is so effective it increases volume and saves per-unit manufacturing and market costs in the end?"

Characteristics ennumerated by Mr. Bursk included: (a) "Appearance or appeal of special quality for which customers would be willing to pay a little extra; (b) Distinguishability of brand and package so consumers can be made conscious of it—the carrying through of the previous point, and (c) Frequency of purchase, which works both ways, for it makes brand more important to buyers but at the same time tends to build price-conciousness and makes it harder to charge a premium.

The afternoon of the first day of the convention was given over to meetings of the following committees: Sanitary Specialties Merchandising—C. L. Weirich, acting chairman; Disinfectant Scientific—Dr. George F. Reddish; Aerosol—H. E. Peterson; Public Purchases—R. O. Cowin; Chemical Analysis-Disinfectant Section—W. A. Hadfield and Sprayer—H. E. Reinhardt, Jr.

THE presiding officer at the morning session on June 15, L. J. Oppenheimer, introduced the first speaker, A. S. DuBois of Fuld Brothers, Inc., Baltimore, who discussed "Pine Oil in Scrub Soaps." Mr. DuBois, whose paper will appear in the August issue, stated that pine oil does influence detergency of soap, but its effect depends upon concentration. It does not always improve detergency, and sometimes has an adverse effect. In connection with testing of pine oil in soaps, Mr. DuBois stated that the establishment of a standard test procedure is important.

"Selling Cleanliness and Sanitation" was dscussed by Dr. W. W. Peter, M. D., chief of the training section of the Institute of American Affairs, Division of Health and Sanitation, Washington, D. C. Dr. Peter told of his early experiences in China and the Philippines and reviewed some of the accomplishments of Cleanliness Institute with which he was connected until this group's activities were discontinued a few years back. He described the current operation of the U. S.—Latin America health program, in which he said about three times as much is spent for insecticides as for soap in Latin America. Hints on selling cleanliness were given as follows: "1.) Follow up leads. Answer letters. Answer even those that superficially lack customer smell. 2.) Use attractive bait. Some manufacturers' literature, he commented, is arresting and attractive, some is a bit stodgy. 3.) Go out whole hog, not to sell a bill of goods, but to analyze customer situations, problems and needs. 4.) Arouse customer curiosity, but in so doing don't let the cat entirely out of the bag. Hold something back. Make the customer think you have something that is good for his business, then make him do something so that he will think he is taking the lead. Make him ask you. 5.) Stay within bounds in advertising."

W. G. Reed, chief of the Insecticide Division, Production and Marketing Administration, U. S. Department of Agriculture, Washington, D. C., the next speaker, outlined the progress that has been made in getting the new Federal Insecticide, Fungicide and Rodenticide Act into operation and thanked members of the Associa-

PRIZE WINNERS

James E. Ferris of Niagara Alkali Co., chairman of the sports committee, announced the following prize winners in golf, quoits, etc.

Golf

L. G. Cannella	Continental Can Co.	1st Low Gross
Thomas Morgan	MacNair-Dorland	2nd " "
Wm. Sessions	Monsanto Chem. Co.	3rd " "
A. Robbins	Cartier Chem. Co. (Canada)	1st Low Net
H. F. Seeland	Stanco Inc.	2nd Low Net
E. J. Campau	Standard Oil of Indiana	3rd Low Net
Eugene McCauliff	Glyco Products	Longest Drive
W. E. Bissinger	Pitts. Plate Glass	Nearest to the Pin

Quoits

A. L. Sodergreen	West Disinfecting Co.
George Goetchius	Rohm & Haas
John O'Neill	Westvaco Chlorine Products
M. J. Burnell	Geigy Co.
Wayne Dorland	MacNair-Dorland Co.
Harold Feuchter	J. T. Baker Chemical Co.

Gin Rummy Champion

George Simmonds	U. S. Sanitary Specialties

tion for their part in its smooth functioning. Dr. Reed, whose paper appears elsewhere in this issue, offered numerous suggestions to facilitate registration under the new act.

The "Work of Chemical-Biological Coordination Center of National Research Council" was described by Dr. Roger B. Friend, State Entomologist of New Haven, Conn. He stated that the purpose of that organization is the coordination of research on various technical problems related to insecticides, fungicides, rodenticides, etc., so "that any investigator can have a firm base upon which to undertake experimental work." It was with this in mind that the Chemical-Biological Coordination Center of the National Research Council was formed. The Center was organized in July, 1946, the outgrowth of a committee operating under the Office of Scientific Research and Development.

The two main activities of the Coordination Center are: "(a) to obtain, assemble and organize data and information for the purpose of correlating chemical structure and biological activity; (b) to sponsor preliminary screening of chemicals and to determine their biological effects on a series of laboratory animals and plants. In connection with its screening program the Center is soliciting synthesized compounds from private investigators, institutions and commercial laboratories. Many of these compounds have never been tested, others may have been examined for only a single purpose. Facilities at present permit the screening of rodenticides, insecticides, fungicides and repellents. . ." Dr. Friend then outlined the procedure for handling chemicals submitted to the Center. At the present time, 14 government and 13 non-government laboratories have been approved for screening these compounds, he stated.

The feature of the afternoon of June 15 was the golf tournament, prizes for which were awarded to the winners at the banquet Wednesday evening.

The showing of the color and sound motion picture, "Better Livestock" through the courtesy of Ray L. Cuff, regional manager, National Livestock Prevention Board, took place on the evening of June 16. In addition, a number of the films available for distribution through the Health and Sanitation Division of the Institute of Inter-American Affairs, on cleanliness and disease prevention were shown by Dr. W. W. Peter.

Insecticide Forum

THE morning session of the final day of the meeting, June 16, opened with a question-and-answer discussion of "What's Wrong with the Insecticide Business?" Ira P. MacNair of *Soap & Sanitary Chemicals* acted as moderator and read a number of questions prepared in advance which were answered by various individuals from the floor.

In a prefatory remark, Mr. MacNair stated that he believed one of the factors contributing to the present low status of the household insecticide business is the comparatively recent entry into the field of a number of small firms who know very little about insecticides.

The first question called for comment on the following statement: "The sales and merchandising policies of the household insecticide industry as a whole have been unsound for the past 10 years. Manufacturers have confused the public with a multiplicity of special products. Some of these may be and probably are used incorrectly, give poor results, react against all insecticides, and hurt sales. Simplifications and streamlining of products are necessary if this confusion and misuse are to end."

William J. Zick of B. Heller & Co., Chicago, commented that the statement covers all of the difficulties of the industry in the past few years. He questioned that all of the current troubles of the insecticide business could be laid at the door of the industry itself. Other factors listed by Mr. Zick as responsible for the present plight of the insecticide industry were the withdrawal of pyrethrum in 1942 for civilian insecticides; the implications of the announcement accompanying the withdrawal; the introduction of DDT and its sale by other than established firms in the insecticide field; the unwise and often extreme publicity accompanying the introduction of DDT, making it appear that products on dealers shelves were inferior or obsolete; and the development of aerosol type insecticides and their subsequent promotion as an advancement over older, spray-type insecticides. When pyrethrum was removed from the list of materials that might be used in civilian insecticides, an accompanying government announcement made it appear that no adequate substitutes were available and that war-time insecticides were inferior, Mr. Zick stated.

In the original marketing of DDT insecticides, Mr. Zick observed, the industry may have erred in coming out with so many new products. The handling of the introduction of aerosol type insecticides made it appear that they replaced spray type insecticides, whereas both have a place in insecticide applications. A final factor listed by Mr. Zick as contributing to the reduction of household insecticide sales is the housing shortage with fewer population shifts. The normal moving seasons in the spring and fall have practically been eliminated by the lack of availablility of living quarters. In the past, sales of insecticides rose during the moving seasons since people became sanitation conscious when moving into new living quarters.

Extreme price consciousness on the part of manufacturers was given by J. L. Brenn of Huntington Laboratories, Inc., Huntington, Ind., as a possible cause for the present low state of the insecticide market. He also listed a possible reduction in the insect population as a factor, but cheapened products having such characteristics as unpleasant smell were stated to be one of the principal causes for the reported slump.

An informal question relating to figures on the size of the household insecticide industry brought out that figures used by the War Production Board for its estimates set total annual production of finished insecticides, according to Melvin Goldberg of Geigy Co., at between 40 and 50 million gallons. The W.P.B. figure included household and industrial insecticides and stock sprays. (Figures on the insecticide industry are currently being compiled by the Bureau of Census of

the U. S. Department of Commerce, but will not be available until 1949.)

The next question for discussion was: "Although the past two years have been probably the worst two years in the 25 year history of the household insecticide industry, the statement has been made that we as an Association have done little or nothing to determine, first, the real cause of the decline in sales and other troubles, and second, to develop some means of stimulating insecticide sales and improving demand. Whether you agree with this statement or not, will you give your views as to how we might best find out the causes and if possible a cure for our present difficulties,—in short, what can this Association do to bring insecticide sales back up to their levels of four or five years ago?"

Commenting on the above, Walter Andree of Sinclair Refining Co., said that he would prefer to discuss the good job the industry has done in controlling roaches, flies and other insects, rather than criticize what the Association had not done. The jump from pyrethrum type insecticides to the DDT type he named as responsible for confusion about insecticides in the mind of the public.

In discussing current difficulties in the insecticide business, Mr. Andree stated that the action of one large petroleum firm in disbanding its insecticide department and the contemplation of similar steps by other petroleum producers came about as a result of the decline in the amount of petroleum products in insecticides. Increased costs of doing business on a national basis through higher freight and rates of commission have reduced profits on nationally distributed products. However, there is little the Association can do to change these conditions, Mr. Andree pointed out. Should more of the large petroleum companies discontinue their activities in the insecticide field, Mr. Andree said, the business will simply gravitate to the smaller firms.

Another aspect of the question was discussed by A. J. Millard of Stanco, Inc., New York, who stated that up to this point most of the talk had centered on the retail and wholesale phases of insecticide marketing. Little attention was paid to the consumer, he pointed out, adding that some action must be taken to stimulate customer interest. He advocated more consumer advertising in an effort to raise the three percent ratio spent by insecticide manufacturers. The present ratio is well below the average advertising expenditure for other grocery store products, he said. Because of reduced volume and profits, however, the average insecticide manufacturer is not in a position today to advertise extensively, Mr. Millard stated.

NAIDM PROGRAM

Carter Parkinson of McCormick & Co., Baltimore, will head the Program Committee for the 35th annual meeting of the National Association of Insecticide & Disinfectant Manufacturers to be held December 6 and 7, 1948, at the Hotel New Yorker, New York, according to an announcement by Gordon N. Baird of Baird & McGuire, Inc., Holbrook, Mass., NAIDM president. Other members of the Program Committee will be announced later.

A SUGGESTION that the Association engage in a cooperative advertising program was offered by John Powell of John Powell & Co., New York. The insecticide industry has done a good job of cooperative advertising in the past, Mr. Powell stated, and pointed out that something should be done now to tie in with the current food-saving campaign.

Final comment on the question came from Ralph O. Cowin, Standard Oil Co. of Ohio, Cleveland, who observed that the function of an association is primarily educational. He expressed the belief the day of the cream of profits in the insecticide business is over. Mr. Cowin said that he did not think there will be any decrease in the number of bugs or in the long-range volume of insecticides. The problem, he stated, is to package the product to be efficient for the job for which it is intended.

The next question was: "In 1945, during the DDT boom, many cat and dog household insecticides were sold to dealers in all parts of the country. Many of these were made and sold by fly-by-night firms and were practically worthless. At least 50 percent of these low grade products are still in dealers hands and remain unsold. They are clogging the channels of insecticide sales for legitimate manufacturers and will continue to do so until they are eliminated. Does this condition really exist, and if so, what are the best means of correcting it? Can the industry as a whole do anything along this line to clean out these low grade products?"

Carter Parkinson of McCormick & Co., Baltimore, replied that he felt the condition exists, but does not know to what extent. He said he believes the situation has improved and that the smart retailers have reduced their stocks, even though they had to take a loss to do so. Insecticides were definitely oversold in 1945 in Mr. Parkinson's opinion. He suggested that the industry study the present situation and improve its merchandising methods in the future.

John Powell commented that in a recent survey by a drug magazine, it was stated that five percent of all drug retailers' stocks were tied up in "cats and dogs." Two percent was tied up in insecticides of that nature, he stated.

Another opinion, that expressed by Amos E. Badertscher of McCormick & Co., of Baltimore, was to the effect that there are not as many "cats and dogs" on the market as is generally believed. He was of the opinion that the "cats and dogs" might be outlawed by the new Insecticide Act. He also stressed the need to educate both the retail sales clerk and the consumer about insecticides. Dr. Badertscher said that the quality of insecticides has improved over the years and that products as a whole are better today than ever. He observed that people sometimes fail to buy the products for their specific needs.

Two comments were received on the following proposition: "The following statement has been made upon occasion during the past several years: 'The days of pyrethrum in household and other insecticides are

(*Turn to Page* 163)

Spray 'Em to Death!

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Blasts **ROACHES, FLIES, MOSQUITOES, BUGS, INSECTS, ETC... INTO OBLIVION!**

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Registration procedure under the new

FEDERAL INSECTICIDE LAW

By W. G. Reed *

Chief, Insecticide Division
Livestock Branch, U.S.D.A.

MEMBERS of the National Association of Insecticide and Disinfectant Manufacturers are giving the Department of Agriculture their wholehearted cooperation in getting the new Federal Insecticide, Fungicide, and Rodenticide Act into operation. Inevitably, of course, some problems have arisen in connection with registration. However, in a very large majority of cases applications have been processed without difficulty. Many of the problems encountered are not new but have been with us for years. Registration merely brings them forcibly to our attention.

To facilitate the registration of economic poisons, certain points should be observed when applications are submitted. The person preparing the application should study carefully the instructions and note in particular the seven items of information required to be on the label. It is essential that this information be given. A number of registrations have been held up or delayed because the applicant has not followed these instructions. Requests for registration should be made on the application blanks provided by the U.S. Department of Agriculture, as this facilitates handling. Applications made in letter form are acceptable but use of the application blank is preferable and speeds up the operation. The application should give the name and address of the registrant or the name and address of the person whose name will appear on the label, and the name, brand, or trade-mark under which the economic poison is to be sold. A statement of all claims to be made for the economic poison, including the directions for use, should also be submitted. Request for the registration of several economic poisons may be made on the same application blank. Before submitting labels for registration, they should be reviewed carefully to see that the required information is given. Many labels which were satisfactory under the Insecticide Act of 1910, will, of course, not meet the new requirements. Labeling may be in rough draft or typewritten form but should show the proposed wording, lay-out, size of type, and color. Duplicate copies of the finished labels prepared from the sketches accepted for registration must be submitted as soon as they are printed. Registration does not relieve the registrant of any responsibility under the law. However, every label submitted is scrutinized closely and the applicant notified when defects are observed.

When applying for registration, it is important to remember that all labels and labeling should be submitted in duplicate. The labeling should be firmly attached to the data sheet (size 8-½ x 11 inches), on which is given the name and address of the applicant and the brand name of the economic poison. Duplicate copies of all the material, except the application form, are required to be submitted. The application and one copy of the labeling are retained in the office files of the Insecticide Division and the other copy is returned to the applicant when the registration notice is issued. Failure to submit labeling in duplicate results in delays that could be avoided. The application should be accompanied by a statement giving the name and percentage of each active ingredient and any pertinent information concerning the inactive ingredients, if such information is not shown on the label itself. Unless our scientific personnel know the composition of an economic poison, they are unable to evaluate the claims properly or judge whether the directions for use are adequate. Information concerning formulas, other than that required by law to appear on the label, may be submitted as confidential and it will be so handled in the Department.

It is urged that applications for registration be submitted as far in advance as possible of the date when the label accompanying it is to be used. The new law requires the net content to be shown on labels. Frequently labels are received that do not bear such a statement and the applicant fails to indicate on the data sheet that it will be added by stamping or stenciling. In a large number of instances, the label submitted would have been satisfactory but action had to be delayed until the necessary information could be obtained.

Net content must be stated in terms of the largest unit present. Many labels are offered for registration with the net content stated as 16 fluid ounces, 32 fluid ounces, or 128 fluid ounces. There is no objection to the use of these statements provided the net content is also shown as 1 pint, 1 quart, or 1 gallon. Frequently ingredients are not listed by their correct names. A common fault is the use of trade names and abbreviation, rather than the common name or the exact chemical name.

When the second form of ingredient statement (Section 2j (2)) is used, both the active and inert ingredients must be named in the descending order of the amounts present,

* Before Natl. Assn. Insecticide & Disinfectant Mfrs., Spring Lake, N. J., June 15, 1948.

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Here is a sprayer that has more power than any other portable sprayer, yet is convenient and easy to handle. Equipped with 1-gallon non-corrosive tank, driven under low pressure with a high volume of air, it can be used with any type of insecticide, either oil base or water base, and carries insecticides into remote openings in full volume and power.

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and the total percentage of the inert ingredients given. Unless the formula is shown on the data sheet for our information, it is impossible to determine whether or not the ingredients are given in their proper order. We have observed a number of ingredient statements where the active and inert ingredients were not designated as such. In other cases, the statement "Inert Ingredient" has not been given the same prominence as the statement "Active Ingredient."

In some cases an applicant has submitted a label for a small container on which it is permissible to place the ingredient statement on a panel other than the front, and later he has sent us a similar label for a larger size that requires the ingredient statement on that part of the container that is displayed under customary conditions of purchase. It is not required that the ingredient statement appear on the front panel of pint or pound packages; neither is it required on smaller size containers. When typewritten labels are submitted, information should be furnished concerning the size and style of type and the color scheme that will be used on the finished labels. Unless this is done, there is a possibility that some feature of the finished label may be given undue prominence.

In connection with entomological claims as they appear in the labeling of insecticides, it is often the case that directions for use are inadequate or lacking entirely. If concisely stated, the directions can be written so as to provide all the essential information for adequate control of particular pests or certain types of pests, without consuming too much label space. The directions should be given for the control of the various insects named on the label and they should be associated, rather conspicuously, with the specific names of the pests. When generalized, the directions usually lose in informative value.

Often the pests are not specified against which the product is to be applied. To name all individual controllable species is not feasible in many cases and is not necessary; however, the types of insects which the product is intended to control should be indicated. We have observed quite a number of labels that have inappropriate recommendations. For instance, lice are confined to the animals and birds upon which they feed and therefore would not be controllable by application of insecticides to premises only. The broad term "mite" should always be qualified, as by referring to poultry red mite or sarcoptic mange mite. No mites are of general importance as household pests, although they are frequently referred to in the labeling of household insecticides. Weevils, moths, and termites are names for particular groups of insects which are wrongly employed as synonyms for cereal pests, clothes moths, and boring insects, respectively. The expression "stored product pests" or "cereal pests" is more specific than the word "weevils," a term which would apply also to such insects as the plum curculio and the alfalfa weevil. Unless fabric protection is mentioned, the word "moth" is ambiguous and might refer to any moth attracted to lights from outdoors or emerged from infected breakfast cereals in the kitchen. The word "termite" should be restricted to true termites which must be controlled by wood or soil treatments with particular insecticides.

W. G. Reed, who presented the discussion that appears on this and accompanying pages, suffered a coronary thrombosis on his way back to Washington, the night of June 15. He was riding in a car driven by Joseph A. Noone of Pennsylvania Salt Manufacturing Co., Philadelphia. Mr. Noone took Mr. Reed to Jefferson Hospital in Philadelphia, where he was expected to remain until around July 7.

Specialized uses of insecticides should be distinguished carefully in the writing of label directions. For instance, an ordinary space-type moth spray should not be referred to as a mothproofer unless it will actually give this type of protection when used as directed. In order to mothproof fabrics, the goods must be moistened or dampened throughout. Otherwise, no period of protection should be claimed for articles not stored in insect-tight containers. Directions for applications of insecticides having residual value should be clearly distinguished from directions for space spraying, especially in the control of flying types of insects.

A number of expressions are commonly employed in insecticide labeling which are not warranted. Examples of these are the words "eliminate," "eradicate," and "exterminate" for which "kill" or "control" are usually suitable substitutes. Expressions frequently employed which are too inclusive when unqualified are "insects," "other insects," and the abbreviation "etc." Particular controllable pests might be named or indicated by a group designation. The comparison of one product with another, such as DDT and sodium fluoride, usually leads to general statements which are false and unwarranted. To state that one product or compound is a certain number of times more effective than another compound is true for but a limited set of conditions.

In the registration of germicides and disinfectants, the number of labels which have been submitted, bearing unwarranted sterilizing claims, is surprising. Many applicants have attempted to employ qualifying words with these claims—such as, "practically sterile," "commercially sterile," or "surgically sterile." It is the opinion of the Insecticide Division that an article is either sterile or it is not sterile. The words "sterilize," "sterilization," and "sterile" are exact terms which cannot be qualified. They express a precise idea; namely, the freeing of a material, container, or space from living microorganisms of all kinds. If a thing has been treated in such a way that no growths of any kind can be produced from it by appropriate culture, then—and then only—has it been sterilized.

Many labels have been submitted carrying objectionable phenol coefficient claims. Where such a claim is made, it should represent the activity of the product as offered for sale, and should not be expressed as a value calculated back to one of the active ingredients employed. It should not be given in a sliding scale form. When employed, the recommended use dilu-

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tion for disinfecting should be no greater than 1 part of disinfectant or germicide to a number of parts of water, found by multiplying the phenol coefficient as determined against *E. typhosa* by 20. The coefficient should not be stated on the labels of mercurials since it tends to give a misleading picture of their germicidal efficiency. In stating the coefficient, reference to the test organism may be included; but, if it is not given, it is assumed that the determination was made using *E. typhosa*. Years of experience have shown that with many types of commercial disinfectants, the phenol coefficient as determined by the official A.O.A.C. method provides a reliable presumptive index to germicidal activity, and when employed as herein indicated, will usually serve to provide use solutions of adequate strength to disinfect inanimate objects. For this reason, the Insecticide Division recognizes and uses this method and will continue to do so until a more appropriate test can be worked out. It will, of course, always be true that the final criterion of effectiveness with any disinfectant is a test conducted under the actual conditions existing where the product is recommended for use.

The Federal Insecticide, Fungicide, and Rodenticide Act stipulates that the label shall bear adequate directions for use. Factors which must be considered in preparing adequate label directions for use with disinfectants are (1) the nature of the germicide itself and (2) the uses recommended.

Applicants have often failed to recognize that pine oil disinfectants are not effective against pyogenic bacteria and should not be recommended for hospital use where such organisms have special significance; that sodium hydroxide or lye is not effective against *Mycobacterium tuberculosis* and should not be recommended for use in disinfecting premises where the primary objective is the elimination of this specific organism; and that hypochlorites and quaternary ammonium germi cides should not be recommended for use on uncleaned surfaces, since they combine readily with organic matter to be inactivated.

Frequently the only direction given is a statement on the concentration of the product to use. An indication in outline form, at least, of the mode of application should also be given. When a product is recommended for the cold disinfection of surgical instruments, use directions should adequately outline a mode of application that will insure contact of the disinfecting solution with the infectious agents which may be present on the instruments. This will require instructions for cleaning the instruments prior to or on immersion in the disinfecting solution to remove adhering blood and serous exudates. Where surface active products having a special affinity for fabrics are recommended for disinfecting fabrics, the directions should be quantitative with respect to an amount of product to a given amount of fabric by weight. If a product is recommended to disinfect poultry drinking water, the directions for use should specify addition to the water at such concentrations and in such a manner as to disinfect the water at all times.

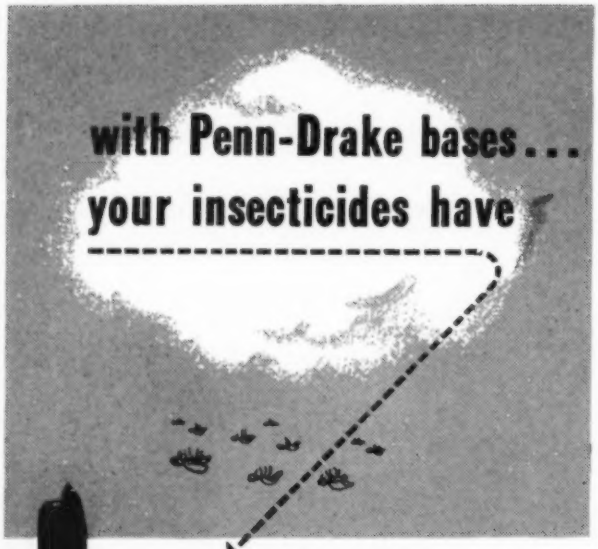
Directions prescribing dilution of coal tar distillates, pine oil, and other products in mineral oil, kerosene, fuel oil, or other anhydrous solvents for the disinfection of poultry houses and stables are objectionable, since products applied in this manner cannot be relied upon to disinfect.

Labeling Sanitizers

RECENTLY a group of new products called "Detergent-Sanitizers" or "Germicidal-Detergents" have appeared on the market. In the labeling of these products, it is essential for the label to differentiate clearly between sanitation and disinfection. If the product is represented solely as a detergent-sanitizer and no germicidal claims made, use directions for cleaning and sanitizing in one operation will be accepted, providing the product when so used will, in fact reduce the bacterial counts of dishes, glasses, dairy utensils, and food-handling equipment to safe levels as judged by Public Health requirements. If the product is represented as a germicide or to possesss bactericidal properties, directions for sanitizing uses alone are not considered sufficient to provide for the requirements in the law. They may be given but the label must also carry directions for application of the product in such a manner as to give reliable disinfection. This will necessitate instructions for proper cleaning with the detergent-germicide, followed by immersion in a fresh germicidal solution of the product as a disinfecting rinse.

Fungicide labels as a group are in excellent condition. This is probably the result of careful review under the Insecticide Act of 1910. Herbicides, or weed killers, coming under the Act for the first time, have presented a number of problems. The ingredient statement of fungicides and herbicides should show the true chemical names of the ingredients. Trade names of products are not acceptable for names of active ingredients. Products containing copper should show the source or origin of the copper, since the fungicidal activity of copper is associated with the soluble copper content. When copper is present in the form of compounds of definite composition, the name of such compounds should be given—such as, yellow cuprous oxide and copper sulphate. When copper is present as an indefinite compound, the copper is to be expressed as metallic and the source of the copper given—such as, copper (in basic copper sulphate) expressed as metallic. If the name of the fungicide indicates the source of the copper, such as bordeaux mixture or copper carbonate, active ingredient would be stated as copper expressed as metallic.

For herbicides containing sodium arsenite, the chemical name "sodium arsenite" is preferred over the name "arsenic trioxide." Those containing 2,4-dichlorophenoxyacetic acid should give the form of the chemical present. If the 2,4-D product contains the free acid or is a mixture of the free acid and sodium carbonate, the active ingredient is expressed as the acid, whereas if it is present in the form of sodium salt, amine, or ester, the true chemical name should be given with the equivalent amount of the 2,4-dichlorophenoxyacetic acid also stated as a footnote. When herbicides contain a mixture of the



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ethanolamine salts, the active ingredients should be expressed as ethanolamine salts of 2,4-dichlorophenoxyacetic acid with the percentage of 2,4-dichlorophenoxyacetic acid also given. The name "alkanolamine salt of 2,4-dichlorophenoxyacetic acid" is too indefinite.

The front panel of the label of a fungicide should contain the names of the principal crops on which it is intended to be used and of the diseases that are to be controlled. Herbicide products should likewise contain the names or types of weeds that are to be controlled or the places or crops where weeds grow that are to be controlled. It is not expected that all crops and their diseases or weeds to be controlled would be given. Broad claims for fungicides—as "For use on fruits, vegetables, and ornamentals"—would not be acceptable, while statements such as control of "peach leaf curl," "apple scab," "tomato late blight," "tobacco wildfires," and similar terms are acceptable. Herbicides claiming use "Against all lawn weeds" or "Control of annual and perennial weeds in grain fields" are too broad and should be modified. The claim for 2,4-D products, "Does not harm common grasses," is too broad since bentgrass and St. Augustine grass are injured by 2,4-D. The top growth of perennial weeds as Canada thistle, leafy spurge, and garlic may be killed by one application of 2,4-D but repeat application for one or more years should be suggested on the label to kill the roots and underground stems of these hard-to-kill weeds. The label should suggest that care must be used to avoid saturation of the ground with 2,4-D chemical, since excessive amounts in the soil will inhibit for a short time the growths of crops planted later.

Precautionary statements to warn of the hazards in the use of fungicides and herbicides on agricultural crops are receiving considerable attention. Fungicides containing sulphur, or lime and sulphur, should bear a warning of possible injury when used on fruit trees in a spray or dust schedule during hot weather. To avoid injury to the crops, such sulphur products are not to be used on apple foliage or fruits within 10 to 15 days or longer, depending on the location, before or after an oil spray. Copper fungicides are not to be recommended for early season sprays or dusts in apple orchards because of the danger of causing fruit russet on copper-sensitive varieties. Contact herbicides as oils, sodium arsenite, and sodium chlorate should contain a warning not to apply them to desirable plants or near roots of such plants. Herbicides containing 2,4-D will injure susceptible desirable broadleaf plants with which they come in contact and adequate precautions must appear on the label to warn of their hazards. Dust products are known to drift for great distances and they may cause injury to beneficial broadleaf plants and crops at a distant point from where the dust is applied. Dusting by airplane in the vicinity of susceptible crops should be avoided; however, spraying by airplane is less hazardous as sprays are less apt to drift. Herbicides containing 2,4-D should not be stored near or transported with seeds, fertilizers, fungicides, or insecticides, since they may become contaminated and cause injury to crops. Sprayers and dusters used to apply 2,4-D herbicide should not be used for other purposes, or if used must be cleaned thoroughly with suitable chemicals. Vapors from esters of 2,4-D may injure crop plants in the immediate vicinity and this should be stressed when giving directions for applying them to weeds in orchards and vineyards.

Fungicide Labeling

THE labels of fungicide and herbicide products should contain adequate directions for use against the diseases and weeds intended to be controlled. The directions should indicate the measured amount of the product to add to 1 gallon or 100 gallons of water or other liquid to make a spray, and should give an acceptable rate of application in gallons of spray or in pounds of dust to use per acre. Herbicides containing 2,4-D used on agricultural crops, should give the rate of application in terms of pounds or fractions of pounds of 2,4-dichlorophenoxyacetic acid equivalent per acre. Fungicides used as wood preservatives against wood-rotting fungi should give directions to saturate the wood by dipping, and when brush or spray treatment is recommended, that two or more coats should be applied to saturate wood that comes in contact with the soil. Herbicides are often recommended to kill weeds and woody plants along ditch banks, irrigation ditches, ponds, and streams. Labels for such use should call attention to the hazard of contaminating water used for irrigation or domestic purposes.

Words on the label such as "sterilize" and "sterilization" should not be used. In the minds of those dealing with plant diseases, sterilizing soil means freeing the soil of all plant life including spores. The use of this term in the closely allied herbicide field to mean only rendering the soil unproductive is likely to lead to confusion. The words "eradicate," "eliminate," and "exterminate" are objectionable unless appropriately modified. Words less broad in scope, such as "controls," "reduces," "kills," and "destroys," are acceptable.

The new Act states that "The term 'misbranded' shall apply to any economic poison if the label does not contain a warning or caution statement which may be necessary and, if complied with, adequate to prevent injury to living man and other vertebrate animals, vegetation, and useful invertebrate animals." In addition, the regulations describe what constitutes "highly toxic" poisons.

Maunfacturers, in general, have been anxious to conform to the law but certain differences of interpretation have caused some difficulties. This has been particularly true of caution statements. The law requires caution statements for many compounds and formulations which have been merchandised for many years without such labeling.

Data upon the toxicity of many economic poisons are not generally available to economic poison manufacturers and a considerable amount of confusion has resulted. In general, the manufacturer has decided to "play safe" and use the labeling specified for highly toxic compounds, whenever there is a reasonable possibility of a formulation being in that

(*Turn to Page* 163)

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RAT CONTROL PROGRAM REPORT

By Harold Noble*
S. B. Penick & Co.

The extensive use of "Kit Bag" printed matter such as that shown in photograph at right is important in the program.

THE work of the National Committee on Rat Control has been in progress for the past six months, both in the rural areas and in approximately 500 cities. This work had its inception in the need for increased tonnage of foodstuffs to be shipped abroad in the emergency last fall, and the results observed so far demonstrate that rat control should be a continuing and persistent effort. No losses caused by rats are necessary. Rats have no economic reason for their existence. They are predators with no redeeming features. By carrying disease, rats have killed more people than all the wars in history. In Louisiana, typhus fever, one of the diseases carried by rats, was reduced from 560 cases in 1945 to 261 in 1946 through organized rat control. The rat-borne plague swept through Asia and Africa in epidemic proportions during the first two years after World War II. There were 72,000 cases reported in India alone. In Florida, as a whole, according to estimates, 75% of the rats are infected with typhus fever. In addition they spread plague, tularemia, trichinosis and other dread diseases. 30 tons of food were lost due to contamination by rats during two months in San Antonio, Texas. In a group of warehouses in a Gulf Coast city, 4 million pounds of sugar, 33,000 pounds of grits, 30,000 pounds of flour, 25,000 pounds of beans and 20,000 pounds of rice were condemned by Health Department inspectors because rats had fouled the whole lot. It is estimated that 80% of all food-handling places in the United States are infested by rats. Approximately 80% of the judgments, under the Food, Drug & Cosmetic Act, resulted from inspectors finding rat hairs and rat hair fragments in food. Rats destroy or contaminate 200 million bushels of grain and the overall loss caused by rats per se is over two billion dollars per year. They are more numerous than the people of the United States.

The need for a planned program was evidenced last year by the fact that Congress appropriated $1,000,000 under the Food Conservation Program to be spent under the direction of the Department of Agriculture, and $160,000 of this was allocated by the Department of Agriculture to the Department of the Interior for rat control. The Office of Food & Feed Conservation was set up in the D. of A. and this unit addressed itself to the rat program in the rural areas. The Department of the Interior—particularly through its Fish & Wildlife Service—applied its experience to both the rural and municipal campaigns.

It is a fact that systematic rat control has been the practice in many parts of the country for twenty or thirty years, particularly in the Southeastern Seaboard States and in certain progressive muncipalities throughout the Nation. The North Carolina State Board of Health has been working 10 years on rodent control as part of its program for endemic typhus fever control, cooperating with the U. S. Public Health Service, municipalities involved, and the local health departments. Ratproofing and eradication projects have been carried on in 15 cities and towns. Six of these cities are now actively engaged in these projects; the remaining 9 carrying on ratproofing maintenance and eradication activities. In addition, they supervised rat-poisoning campaigns in approximately 18 towns and cities this year. During the past year $154,000 of local and State funds and approximately $42,000 of Federal funds, were spent on typhus and rodent control work in North Carolina. 25,000 pounds of red squill bait, 50 gallons of 1080, 100 pounds of Antu and 1,000 pounds of Cyano "A" dust were distributed. Approximately 45 men are engaged in typhus and rodent control work in North Carolina. The Fish & Wildlife

* Presented at NAIDM Mid-Year Meeting, Spring Lake, N. J., June 16, 1948.

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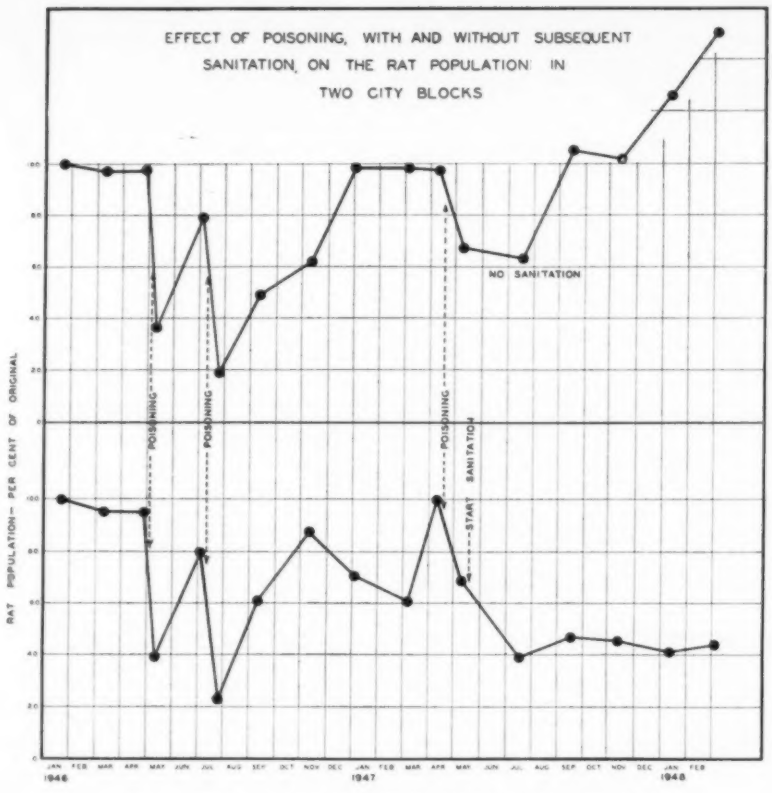

Above: Chart by Dr. David E. Davis of Johns Hopkins School of Hygiene and Public Health Baltimore, shows sanitation need.

Service has had the responsibility of rodent control and the Public Health Service steps in with an intensive campaign when an epidemic of rat diseases threatens, but the law requires they step out when the threat abates. Fish & Wildlife Service has offered rat control experts and information to localities for years, but its funds have never been adequate to meet the demand. They had about 15 trained field experts and during the campaign, this staff was doubled. It seems clear the Federal Government should expand this service proportionately with the current aroused interest in rat control and legislation is being sponsored to accomplish this end. Without the present well trained but woefully understaffed F&WL, it would be impossible to report any marked accomplishment, and this point should be borne in mind as we proceed with our analysis.

It was recognized that with the appropriation at hand, not a dollar could be spent for actual rat eradication. Rather the money was spent to prepare printed matter, posters, signs, fact sheets, information bulletins, radio scripts, newspaper articles, specimen speeches and weekly newsletters. If nothing more were done than the assemblage of facts, the revision and editing of instructions, I would applaud the effort on just this phase. Some of the funds were spent to employ extra field men and pay their necessary expenses. Editions were run in the Government printing office—100,000 on one, 50,000 of another, 30,000 of another and distributing down to the county and municipal level. Mats of the fact sheet were made and something like 200 were issued on request. This enabled local committes to reprint these folders at their own expense if they so desired.

The rural plan was formulated at the Department of Agriculture in Washington and channeled through the State Extension Services of the land grant colleges and through them, to the county agent system. The 4-H Clubs, Chambers of Commerce, radio stations and the rural press joined forces, each in its own sphere, to make the rural population rat conscious. It was urged that local rat committees be formed and the facts, information, suggestions and instructions obtained from the various printed bulletins, assembled in what was termed the "kit-bag," be used in executing local campaigns. To the extent that these were used, excellent results were attained. It is impossible to estimate the tons of foodstuffs saved on the farms and in storage as a result of this broad publicity campaign in the rural areas. It is a conclusion of those in position to judge that the impetus of this systematic drive is an assurance that rat control will become a continuous practice in many farm communties.

Summary of Rural Campaigns from 22 States up to April 1948

Vermont: Mostly planning for future campaigns.

Massachusetts: Mainly educational work.

Rhode Island: Mainly educational work.

Pennsylvania: 33 out of 67 counties distributed 38,000 lbs. of bait through State Entomologists. November and February best months for control on farms. Efforts being made to induce officials of small cities to enforce control on dumps and trash disposal areas.

Maryland: 5,000 persons took part in March. Used 7,500 cans of Antu in several counties. University of Maryland planning school for county agents this August to give further instructions to workers.

Virginia: 34 out of 100 counties worked from October to April. Results fairly satisfactory. Farmers reported disinclined to buy baits. State will continue publicity and educational program this fall.

West Virginia: R Day was February 13th. 29 counties out of 55 participated. 9 reported good results, 14 fair, 6 not too enthusiastic. 7,000 cans of Antu and 5,000 cans of red squill used—57,000 dead rats counted. Estimated reduction 250,000. Follow-up campaign in course of preparation for October.

Indiana: 34 counties out of 92 worked from the fall of 1947 to April 1948. Similar campaign in four cities. 16,000 lbs. of red squill bait used.

Kansas: 20 counties out of 105 counties participated with varying reports of success. Too many dogs were killed as more people are buying poisons. Mills, elevators and feed stores do work on their own. Continued publicity planned.

Iowa: 21 counties out of 99 participated. All reported successful. Improper timing of the national campaign weakened the State publicity. Work will be resumed in September.

Michigan: 24 out of 83 counties participated. 31 campaigns in operation in May. 12,000 people participating. 45 county agents planning October or November campaigns.

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Minnesota: 45 counties conducted 57 demonstrations out of a total of 87 counties. County agents training meetings this summer prior to actual fall campaigns.

Missouri: 15 counties out of 115 counties participated. 200 farmers used baits with good kill. 10 county agents in 5 cities conducting campaigns.

Oklahoma: 9 counties out of 77 participated. Some using 500 lbs. of bait and others as little as 25 lbs. of bait. Difficulty in securing poisons reported.

Arkansas: 14 counties out of 75 participated. Weather retarded work. Drive will be resumed in the fall.

Texas: 106 counties out of 254 participated. Results reported very effective and rural people are requesting renewal in the fall.

Utah: County Commissioners and county governments bought the baits and distributed free to farmers. Lack of interest by some people, lack of manpower and finances reported injuring complete coverage.

Wyoming: 3 counties out of 24 cooperated. Results reported as 93%, 90% and 87% effective. Obstacles reported—difficulty in securing adequate cooperation from farmers, ranchers and rural communities. Further publicity planned.

Montana: Rats not a serious problem in that State.

Oregon: Progress is reported; a number of counties participated. Baits were distributed through feed and seed dealers. A reluctance on the part of some dealers to handle the recommended type of bait on the limited profit margin was observed. Future plans include further educational activities.

North Dakota: Snow impeded winter plans. Timing was off. Spring drive was organized. 36 counties out of 53 were in operation by April. Further educational activities planned.

NEW York City will distribute a million leaflets provided by the national committee, using police, firemen and sanitation personnel. Simultaneously they will take a census and report to the Department of Health according to a planned interrogation form. For householders, the use of red squill only is recommended.

It is in the operation of the city programs that industry has taken a more prominent part. Secretary Krug of the Department of the Interior wrote letters to the Governors of the 48 States and to the Mayors of cities with populations of 10,000 and over. The letters to the Mayors requested and suggested strongly that they appoint local committees for rat control work. Some 1,050 cities were contacted, and it is quite notable that over 500 of them responded. They were provided with the literature mentioned in the "kit-bag" and Hamilton Warren of the National Carbon Company was appointed by Mr. Krug as Chairman of the National Urban Rat Control Committee. Lists of these cities with the names of the key men were bulletined to all members of the Committee. 30 cities were designated as demonstration cities where actual campaigns were carried out. Officials from neighboring cities and areas were invited to observe firsthand the details of a program, and this type of publicity was found to be most effective. A specialist from the Fish & Wildlife Service was generally assigned to guide the work. Chairman Warren was able to enlist the cooperation of trade associations such as the National Pest Control Association, Agricutural Insecticide & Fungicide Association, bakers, confectioners, restaurant keepers, distilled spirits manufacturers, millers, brewers, the corn industry, building owners and management, sanitary engineers and the American Public Health Associations.

Within their own industries, many of these organizations have initiated and carried on effective rat control work. For instance, the bakers themselves and without much publicity, which naturally they would not favor, were given concrete instructions and guidance. Rats have been a costly problem within many of these industries and these groups took immediate advantage of the extensive, up-to-date and attractive literature prepared for the current campaign. The pest control associations likewise contributed professional experience in their respective localities, and members of our own Association serving on committees furthered the work through their outlets and house organs.

The National Broadcasting Company presented in March a unique half hour talk on rat control over a national network. The Cavalcade of America, the duPont program, likewise has mentioned the campaign several times. The Metropolitan Life Insurance Company is distributing several million leaflets on rat control to their agents. The Prudential Life Insurance Company mentioned the subject on their radio program; also Armour & Company, Allis-Chalmers and the Chicago, Milwaukee & St. Paul Railroad. One of our members, the Standard Oil Company of Indiana, likewise has mentioned it several times on their programs. F&WL has accumulated thousands of clippings from newspapers, weeklies and monthlies covering many phases of rat control.

SOME elements of practical rat control might now be considered. The first essential is what is generally termed good housekeeping. This means proper collection of garbage, refuse and trash and calls for action by the municipal Governments. This is stimulated by an aroused public opinion. It may require the enactment of sanitation ordinances and the enforcement thereof. I know of one city which collected garbage but once a week in the summer time and once in two weeks in the winter. Garbage pails are the size of ash cans and the local practice is to apply chloride of lime in the receptacle. A rat control program has no chance for success under conditions like that. On the other hand, certain other cities serve summonses persistently so that rat control becomes an economic necessity. The results of good work may be observed in cities A, B, and C, and the experience can be bulletined to other cities as an example as to what can be accomplished by the various control methods. "Police club" procedures are not recommended. Rather it is thought better to point to the good example. Let me quote the experience of Chickasha, Oklahoma, (population 15,000): "Two years ago, the Junior Chamber of Commerce took up rat control. Merchants were assessed 25c a foot for funds to buy poison baits. The Jaycees provided the funds, the city the labor and F&WL supervised. Three semi-annual baitings were performed; the local press assisted, and the rat population was reduced 50%. Individual owners actually did much ratproofing. Funds are still in hand for two more baitings." This is a thumb-nail sketch of how the plan works.

Ratproofing buildings is often needed and as an example, the Empire State Building, when erected, was built to keep rats out. Even if they moved in, there are no harborages there in

(*Turn to Page* 151)

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LOW PRESSURE AEROSOLS

Their Future will Probably be Determined in 1949

By Russell B. Stoddard
U. S. Industrial Chemicals, Inc.

BEGINNING with the development of the military aerosols, speculation was rife as to their probale repercussions on the household insecticide field when they became available for civilian use. The general impression was that they would meet with immediate acceptance, but because of their necessarily high cost would appeal only to the luxury trade. Before this theory could be tested out fully by practical experience, it became evident that they would shortly be superseded by low-pressure aerosols offering reasonably equivalent effectiveness at much lower cost.

This altered the situation materially, and resulted in a vastly increased amount of speculation and debate which produced highly optimistic and almost astronomical predictions of the potential market, together with wide differences of opinion as to whether these figures could ever be reached or approached. In the meantime, after unanticipated delays and difficulties, low-pressure aerosols became an actuality for the 1948 season. However, their introduction was so delayed by the unavailability of containers, and so confused by the complexity of other factors, that the 1948 season cannot give more than an indication of the possibilities. Two major questions of immense importance to the industry will be only partially answered. What is the potential volume of demand for low-pressure aerosols, and what effect will their large-scale introduction have on the industry as a whole and on individual segements of it? These questions can and in all probability will be answered quite conclusively within the next twelve months.

Low-pressure aerosols at their best combine a maximum of convenience with satisfactory effectiveness and reasonable economy. Such a combination makes an irresistible appeal to the American buying public. If there were no other factors to be considered, it would be safe to make the prediction that the potential market is almost unlimited. Actually, life, particularly in the insecticide business, is not that simple. Conversion of potential business into actual sales volume in a highly competitive field involves a combination of intelligent efforts, sound judgment, and good luck, too seldom encountered together.

It seems probable if not certain that 1949 will provide the answer to the future of low-pressure aerosols. It seems almost equally certain that the answer can be an extremely favorable one. Unfortunately it is by no means certain that the answer will be favorable. Neither the past history of the household insecticide business nor the brief and confused experience with low-pressure aerosols this year furnish ground for undiluted optimism.

The purpose of this article is to present for consideration and discussion some of the fundamental propositions which have an important bearing on the success or lack of success of the program. Some of these are axiomatic or nearly so; others may be open to question and some may be regarded as highly controversial. The intention is to provoke thoughtful consideration of the points which may make or break a development which is still in the critical phase.

No one is likely to question the proposition that consumer acceptance is the fundamental requirement. Strangely enough this simple fact has been and continues to be forgotten too frequently. The fact, therefore, cannot be too strongly stressed that the future of the low-pressure aerosol lies in getting and keeping consumer acceptance and that any analysis of the problem comes down to a presentation of points which are necessary to accomplish this purpose. Whether the order in which they are presented here is the order of their importance is a matter of personal opinion.

Mechanical Performance

Unlike most other insecticides marketed by the industry, correct formulation is only a part of the problem. Consumers are interested solely in aerosol performance. Containers, and particularly the valve, are of primary importance. Defective, leaky, or otherwise unsatisfactory packages, will react strongly against the item. If now, or at any time in the immediate future any substantial proportion of the packages reaching retail channels or consumers prove to be defective, irreparable damage will be done, the extent of which will depend solely on the number of such instances which occur.

The foregoing is not intended as a reflection on the packages presently being marketed or as an implica-

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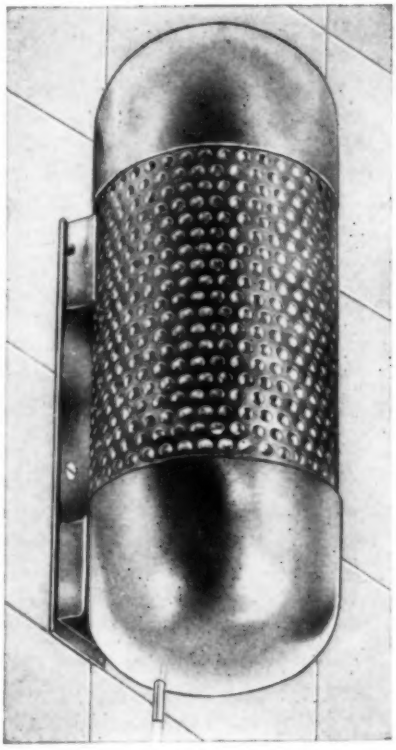

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tion that any such reflection is likely to be deserved. It merely underlines the obvious fact that satisfactory aerosol performance is dependent upon dispensers.

Insecticide Effectiveness

Industry lacks neither satisfactory materials nor adequate knowledge of how to formulate them. Both are available and adequate to permit manufacture of highly effective low-pressure aerosols at reasonable costs. Any desired standard of performance within reason can be met.

There is at present no accepted standard of performance nor any prospect that one can be set up and agreed upon for 1949. Low-pressure aerosols now on the market vary within wide limits in performance. It may be said fairly that some of them are very good indeed. Most of the others are fully satisfactory, and only a few are near the doubtful level. Actually the major difference here from the consumer's point of view lies only in the necessity of using larger dosages of low grade aerosols to accomplish the same results which may be accomplished with relatively low dosages of the best formulations.

It is suggested as a subject for discussion that the existing situation may not be entirely fair to the public or in the long run beneficial to the industry. The public is not discriminatory or well informed. The tendency is to consider all aerosols as similar or identical and use them in the same way. As a result the purchaser who buys a low-performance product and finds it necessary to use large quantities of it may easily jump to the conclusion that all aerosols are uneconomical and therefore unsatisfactory.

A debatable question is whether or not it is good economics or good public relations to cut formula concentration and formula cost to the point where excessive amounts of the aerosol are needed for satisfactory performance. Some aerosols now on the market are regarded as satisfactory to treat 75,000 cubic feet. Others selling at only a slightly higher price will give equally good performance at 125,000 to 150,000 cubic feet. This is neither illegal nor unethical, but certainly is illogical. In the absence of official or industry performance standards, it seems reasonable to present a proposition that if aerosols are to continue popular with the public they should be formulated to give satisfactory performance at reasonably economic dosages. Also to suggest that in the event a standard is adopted or considered, it must give due recognition to the fact that performance depends on a combination of formulation and container and not on either alone.

Toxicity

No comment is really needed. The nature and use of aerosols and their fine particle size present unique toxicological hazards and forbid the consideration of materials which are or might be dangerous under these conditions of use.

Objectionable Characteristics:

It is certainly axiomatic that the public does not like to use products which are objectionable in any way. In the case of aerosols, odor and irritation are the points on which past and present aerosols have been widely and frequently justly criticized. Any aerosols which transgress unduly in these respects are likely to encounter unpopularity and damage public opinion on aerosols as a whole.

Sales Promotion:

Consumer acceptance may be fairly well guaranteed for aerosols meeting the foregoing requirements, but the consumer must first be induced to buy and try the product. The wave of publicity and curiosity buying which came with the release of military aerosols for civilian use has largely spent itself. If low-pressure aerosols are going to be as widely adopted and used as is entirely possible, a great deal of effective and intelligent publicity and advertising will be required. This season, probably as a result of delays and uncertainties which existed until late Spring, has seen relatively little in the way of sales promotion of aerosols to the general public. In 1949 sales will depend to a very large degree on how completely this situation can be rectified.

Price:

It is a customary assumption that price is a most important factor in consumer merchandising and that the lower the price of an item the greater the potential market. Undoubtedly this is true to a degree with low-pressure aerosols and there is general agreement that the field has been immensely broadened by the drop from the $2.95—$3.95 range which was more or less standard for the high-pressure units. It can be, however, that the importance of price can be and appreciably is greatly over-emphasized. No discussion of prices as such is desirable or permissible, but two points can be made. One is that however desirable low production costs may be in theory, any reduction of aerosol costs which jeopardizes any of the features on which consumer acceptance depends is dangerous. The other point is that cost, price, and distribution discounts should take into account the necessity of a reasonable allowance for adequate sales promotion.

All the foregoing discussion can be summarized by a statement that low-pressure aerosols offer great possibilities to the industry, but that it is easier to damage or ruin these possibilities by unwise or unsound practices than is generally realized.

———•———

An insecticide is prepared from the tropical American plant, *Ryania speciosa*. The stem of the plant is the principal source of the commercial product, which is prepared for use as dusts and sprays under the name "Ryanex." The active principles of the plant are alkaloids, the most important of which is ryandoldine. The toxic constituents of the plant may be quantitatively extracted by water or methanol; they are soluble in most organic solvents except the hydrocarbons. Ryania insecticides are compatible with most other formulation materials, and are markedly more stable than pyrethrum and rotenone on exposure to air and light. They have lower actute and chronic oral toxicities to warm-blooded animals than do the rotenone-bearing plants. D. E. H. Frear, *Ind. Eng. Chem.* 40, 683-9 (1948).

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RAT CONTROL

(*From Page* 145)

which they can live. Ratproofing costs money, but pays dividends. The proper storage of food can well be a subject for education and the kit-bag I have mentioned gives instructions in this regard; use traps and refer to the kit for type of baiting and setting.

Poison the rats. Red squill and Antu are the poisons recommended by Fish & Wildlife and D. of A.

"Red squill is the safest bait for use by the general public. Antu is also good, but must be kept away from dogs and other domestic animals. Stronger poisons such as strychnine and zinc phosphide, may be used, but are dangerous to livestock and humans. Still more dangerous are thallium and compound 1080. They must not be used except by trained exterminators.

"Fumigation with cyanide gas or gasoline exhaust fumes is effective where burrows or buildings can be tightly closed. Fumigants are highly poisonous to humans and livestock."

At this juncture, may I mention a page circular by Dr. David E. Davis of the Johns Hopkins School of Hygiene and Public Health, Baltimore, Maryland, entitled "Principles of Rat Management." In it he says, "The migration of rats is usually negligible because each individual spends most of his life within a very small area called "home range." Recaptures of marked rats show that 80% to 90% of rats live for many months within an area of 60 feet in diameter. Rats seldom cross city streets but if they are liberated in a strange place, they may wander far." This means a section of a city can be cleaned up and the work then proceeds to another area. It means also that Town A may confidently do a good job and need not fear invasion from Town B which is neglecting rat control. Another important point made by Davis is that a rat population may be reduced 60% by poisoning and in two months will increase to 80% of the original population. Poison is again applied and the population drops 75% but within three months, it is back to 90% of the original population, and this buildup is accounted for by the fact that other sanitation measures *are not applied*. When, however, the sanitation measures are applied, the reduced rat population is held at the reduced level and the chart shows practically a level line.

Many of our citizens have been made rat conscious and many thousands of the more civic minded people have acquired practical experience in this work. We probably have, however, merely made one step forward. Let us now be more critical. What impedes or slows down or stops the campaign? It is, in my opinion, the inability of a group of public-minded citizens in a community to sustain a continued interest in the non-dramatic campaign against rats. Continued publicity therefore, is necessary. Campaigns cost money. Some muncipalities are hesitant to add the expense of this to their budget, but there are many active campaigns now going on. More recognition should be given the competent pest control operators because rat control comes very near requiring scientific approach, guidance and direction. The Federal Agency can set the national pattern, and the municipalities can aid in collecting waste matter quickly and enforcing reasonable local sanitation ordinances.

A renewed publicity program will be resumed in the fall. Boy and Girl Scout manuals will emphasize the danger of the rat menace, schools will carry it in their curricula, and womens clubs and associations will do more work in their particular ways. In time, the results will include a more vocal public opinion which, in our democratic life, is reflected in appropriate performance by our public officials. The actual work of eradication, however, calls for greater rèliance on the professional P. C. O's for which there should be compensation.

We, in the industry, know that yellow fever was controlled at the turn of the century in the tropics, particularly in Havana, Panama Canal Zone and Guayaquil. The effectiveness of DDT against bedbugs, the reduction of flies in stables and on range livestock is well known.

Pest control is progessing. Our standard of living insofar as pests and rodents are concerned is far higher than in the generation of our grandfathers. Which city or county will be the first to report 100% control of rats?

INSECTICIDE LAW

(*From Page* 139)

category. Since the "highly toxic" definition covers little known skin absorption and inhalation hazards, it is expected that some uncertainties will remain for quite some time. In the interim, however, products will be judged on the basis of the best information at hand and warnings will continue to be suggested if they appear to be needed.

One other point which has required careful reviewing is that many manufacturers have failed to print the word "Poison" in red. This is a stipulation in the Act and applies to all "highly toxic" products so that failure to conform has caused delay in registration.

IN a few cases long term trouble-free use has convinced manufacturers that certain products are safe, harmless, or non-injurious. Rarely do the facts confirm the logical use of such claims and requests for their deletion constitute a sizeable amount of work. The Pharmacology unit is concerned with assuring the purchaser that he will be given "adequate" instructions for using an economic poison with a minimum of danger to himself. With many new and lethal materials being offered for public use, this function assumes notable importance.

From the viewpoint of the Rodenticide unit, the Section has been concerned with efficiency and proper directions for use, as well as with precautionary statements. In this category, the most common difficulty has been found to be inadequate instructions for handling the mixing of the bait and its distribution. Manufacturers often are inexperienced in the use of their products and, as a natural consequence, many of them fail to give directions which will insure the highest degree of efficiency from them. Correction of this fault constitutes the principal function of the Rodenticide unit.

In closing, let me say that we

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are determined to carry out the provisions of the Act as passed by Congress. In doing so, we want to be reasonable and practical. We want to cooperate with State enforcement agencies and manufacturers. It is only through cooperation that uniformity can be achieved.

FISH OILS

(*From Page* 45)

prospects. The low consumption of fish oils in post-war years has been caused in great part by the uncertain supply reflected by the steady climb in price.

The industry began almost a century ago with the activities of the menhaden fishermen operating from New England ports. Three or more species are included in this group. The crushed fish form a meal, at one time used only for fertilizer, and an oil which found only industrial applications. Research consummated by the Fish and Wild Life Service resulted in improvements so that now the meal is made into animal and poultry feeds and the roe is salted, frozen and canned. By hydrogenation, the value of the oil for soap making was greatly increased. In 1892, the catch amounted to 150 million pounds of fish, and 30 years later, to 800 million. The industry is confined to the North Atlantic and centers in the Chesapeake Bay. In recent years, close to 600 million pounds have been boated during the season.

The pilchards, often called the true sardines, are herring-like fish also. The oil expressed domestically is generally called sardine oil while that from Canada is known as pilchard oil. Both are made exclusively on the West Coast. This industry was based upon canning and began with World War 1. In the early 20's, the screw press was adopted and the cannery waste was converted into meal and fertilizer. Shortly after, the practice of pressing the entire fish was instituted. The industry centers in Southern California which has accounted for nearly 90 percent of the pre-war catch of over 1.2 billion pounds, just about twice the menhaden yield.

The range of the herring includes nearly all of the temperate waters of the northern hemisphere. Domestic operations extend from San Diego to Nome, and from Maine to Nova Scotia. During the past 10 years, the West Coast supply has varied from 44 to 210 million pounds of fish, constantly greater than 30 to 90 million contributed by Amercian enterprise in Atlantic waters. The herring is said to be ideal for processing into livestock meal and oil. The major use is in canning in competition with foreign-packed sardines.

IN SELF DEFENSE . . .

(*From Page* 122)

of course it is figured that the manufacturer's profit is being saved. This may or may not be true depending upon just how fortunate the new manufacturer is with the outcome of any particular batch, not having the "know how." However, one fact that is very true is that while a nickel is being saved in the back room, it certainly isn't out on the sales line and sales consequently suffer. Men who should be out of the office or "factory" contacting customers are trying to assume the headaches of small scale manufacturing .

The laws and regulations covering the production and sales of these products are often not fully comprehended. The cost of standardization is not fully computed. Chances are taken. Consider the special problems in making disinfectants. A manufacturer of raw materials being used has advised "Yes, if you do it this way, you get a coefficient 4." The manufacturer knows that this is not always true and makes careful check-ups, not risking his reputation on the chance of a faulty lot of raw materials or a poor batch.

From the manufacturer's contact with the wholesaler and janitor supply house he hears "Well, Mr. Manufacturer, of course we buy on most rigid specifications; we have carefully studied the entire field and when we compound a product the coefficient must be 4 or 6 whatever the case might be." That is fine in theory but it just does not work out that way. Unfortunately the element of human error enters in together with other variations in conditions each time a batch is compounded. It is indeed right to buy on rigid specifications. The manufacturer does it, but he does not make the mistake of assuming that a particular batch will be phenol coefficient 4 or 6. The legitimate manufacturer takes nothing for granted. He tests each and every batch. These facts are sometimes overlooked by the janitor supply house that wants to make its own .

As stated before, manufacturing your own products is quite in order if the janitor supply company so desires. But let us look at the problem from the manufacturer's side. His ethics are unquestioned as he states that he will not sell to a consumer, but only the wholesaler and jobber. He is confronted with the problem—the wholesaler and jobber are making there own. Is there going to be a turn about in the policy of the manufacturers? You can rest assured that he must either recoup his business from the janitor supply trade, proving his worth and place in the industry, or else he is going direct to the consumer.

The answer really lies right in the laps of the jobbers and wholesalers. Quality will out. It always has and always will and quality is based on "know how," which is a very definite asset of the manufacturer. He must not only know what to do, but also how to do it. It is true it will take a little time for the manufacturer to establish new outlets after the decision is made to enter the consumer field, but the assets mentioned before will certainly carry him a long way toward a successful venture into the consumer field. I believe that a legitimate manufacturer uould rather stay in his present circle, devoting time to research in the development of products for which the wholesalers and jobbers find a need, and supplying them with quality products, but he certainly can not continue to hear " I make my own." This is a situation within the industry which needs remedying—and soon!

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TRADE NEWS . . .

Trenholm Heads Sani-Wax

George A. Trenholm, vice-president and general manager, was recently elected president of Sani-Wax Co., Dallas, succeeding Guy L. Mann. Mr. Trenholm will continue in his capacity as general manager. Other officers of the firm, which was founded in Cleveland, Okla., and moved to Dallas in 1945, are: Gerald C. Mann, vice-president, and P. T. Lee, secretary-treasurer.

Johnson Forms Own Firm

Esler Johnson, formerly Pacific Coast manager for John Powell & Co., New York, recently formed his own firm, Esler Johnson Co., with headquarters at 1212 Broadway, Oakland, Calif., where he will act as a manufacturers' representative. The firm will specialize in the sale of insecticides, fungicides, etc.

New Pyrethrum Paper

A new quarterly publication, *Pyrethrum Post*, dealing with pyrethrum is being published by Mitchell Cotts & Co., London affiliates of Greene Trading Co., New York. The first number is the July issue. Circulation of the publication, which is to go to pyrethrum growers, suppliers, processors, users and others, will be world wide.

Krano Changes Name

Krano Sanitary & Janitor Supply Co., Chicago, recently changed its name to Krano Products Co. There is no change in ownership or officers. The purpose of the change is to afford the company a more practical name.

Adds to BHC Output

As a result of the recent entry into the field of Sherwin-Williams Co., New York, as a producer of benzene hexachloride, a larger supply of the new insecticide is anticipated. The supply will be enlarged by 150 to 200 tons a month, based on a 12 percent technical grade, it is believed. Earlier this year it was thought there might be a shortage of the material depending upon insect prevalence.

HAROLD NOBLE

Noble to Penick Board

Harold Noble, vice-president in charge of the insecticides division of S. B. Penick & Co., New York, was elected to the board of directors July 1. He has been with the comapny for more than 30 years. Mr. Penick succeeds to a vacancy created by the death of Charles W. Speed.

New NAIDM Members

Firms recently accepted for membership in the National Association of Insecticide and Disinfectant Manufacturers include Mortemoth Co., Milwaukee; Pittsburgh Agricultural Chemical Co., New York; and H. W. Hamilton Co., New York.

Decree in Hyman Case

An injunction restraining Julius Hyman, president of Julius Hyman & Co., Denver, from using the processes, formulas and products covered by four patent applications on chlordane was granted by Superior Judge Ulysses S. Schwartz in the Superior Court of Cook County, Ill., recently. The plaintiff in the case, Velsicol Corp., Chicago., was to have all U. S. and foreign patents and patent applications covering chlordane assigned to it. In addition, Mr. Hyman was ordered by the court to refrain from disclosing formulas, processes, products and manufacturing technique discovered or learned by Mr. Hyman while he was employed by Velsicol Corp. A judgement of $4,250 for Master in Chancery fees and charges was rendered against the defendant, Julius Hyman. If Mr. Hyman files an appeal, he must put up a bond of $25,000, the court ruled.

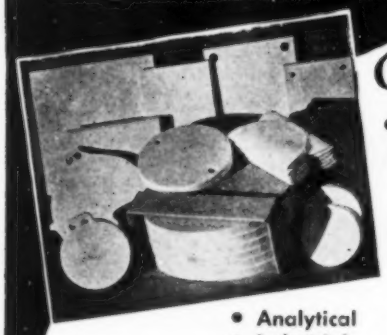
To Study Trade Rules

The National Sanitary Supply Association has appointed the following committee to study and make suggestions regarding the Trade Practice Conference Rules adopted at the recent NSSA convention in Chicago: Joseph Fuld, Fuld Brothers, Inc., Baltimore; Tom Opie, Opie Brush Co., Kansas City; Mohe H. Solworth, Chemco Co., Louisville; Lester Brown, I. Edward Brown, Inc., New York; M. L. Magee, T. F. Washburn Co., Chicago; M. H. Surath, Abbott Supply Co., Detroit.

Westvaco in Merger

A merger of Westvaco Chemical Corp., New York, and Food Machinery Corp., San Jose, Calif., was agreed upon recently by the management and boards of directors of both companies. Approval of the merger by stockholders was to have been voted on during July. Under the proposed arrangement Food Machinery Corp., the surviving company, will change its name to Food Machinery and Chemical Corp. Westvaco business will be operated under the direction of its present management as the Westvaco Chemical Division. The merger agreement will provide for an exchange of one and one-quarter shares of Food Machinery's common stock for each share of Westvaco's and for the exchange on a share-for-share basis of Westvaco's $3.75 cumulative preferred stock for a new preferred stock of Food Machinery and Chemical Corp. having the same dividend rate and substantially the same rights and preferences attached to the present Westvaco stock.

Unsurpassed for Dependable Accuracy



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ROTENONE PRODUCTS

TO FIT YOUR MOST EXACTING NEEDS

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Powder, Resins, Extracts

SAMPLES ON REQUEST

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The QUIET EMPIRE

WET & DRY PICKUP

The Empire Portable Heavy Duty Vacuum Cleaner is a quiet, rugged and portable cleaning plant. Whenever your cleaning problem involves heavy duty and continuous service, your EMPIRE portable will do the job. The EMPIRE is light, mobile and compact.

Exclusive territories open for dealers. Write now for more detailed information.

Empire Chemical Prod's Co.

10 Longworth St. Newark, N. J.

Sanitation at Candy Show

Sanitation techniques in the candy and confectionery trades were discussed at a special forum held June 23 in connection with the annual convention and trade show of the National Confectioners Association in New York at the Grand Central Palace, June 20-25. Participating in the sanitation clinic were Gerald S. Doolin, sanitation director of the NCA, Charles F. Scully, Williamson Candy Co., Chicago, chairman of the NCA Sanitary Advisory Committee, and Edwin Ludewig, N.Y. Dept of Health.

The NCA's Sanitation Department has been in operation since May, 1946. The service features plant inspections made for members on request followed by issuance of confidential reports, with recommendations if necessary for adoption of approved sanitary practices. The department has also arranged for and supervised a series of nine regional meetings for discussion of sanitation problems. "Sanitation News," issued monthly by the NCA, carries information on latest sanitary techniques. Posters are also supplied regularly for plant use, emphasing the importance of good sanitary practices.

Exhibitors at the trade show accompanying the NCA convention included: Dow Chemical Co., Midland, Mich., featuring methyl bromide for plant fumigation; Docona Associates, Glen Ridge, N. J., fumigation chamber; Chem. Mfg. & Dist. Co., Easton, soaps and maintenance chemicals; Huge Co., St. Louis, insecticides.

Hild Builds in Chicago

Hild Floor Machine Co., Chicago, is marking its 21st anniversary by starting construction last month of a $400,000 building at Washington Blvd. and Halsted St. to house sales and general offices and assembly operations. The one-story structure fronting 152 feet on each street, will have a corner section two stories high, faced with plate glass windows extending from street level to cornice, where the company's products will be displayed.

Hild Floor Machine Co. was founded in 1927 by Fred G. Hild. Today, Mr. Hild states, his floor scrubbing and polishing machines are distributed by 35 jobbers and his sales staff includes 25 men operating from coast to coast and in foreign countries. Castings and machine parts are made in various Chicago foundries and factories and assembled in the Hild plant. Completion of the new quarters is scheduled for Jan. 1, 1949.

Fogging to get rid of flies and mosquitoes was part of the preparation for the opening of the summer season at the Lido Beach Hotel, Long Beach, N. Y., recently. General Exterminating Corp., Brooklyn, used a Todd Fog Machine to do the job, which included five acres of ground, the cabana area, dining rooms, solarium, indoor swimming pool and other public rooms.

G. H. Wood Scholarships

Scholarships amounting to $4,500 have been made available recently to nine universities in Canada by Geoffrey H. Wood, president and general manager of G. H. Wood & Co., Toronto. In addition to the nine Canadian universities named in the first announcement, it is understood other Canadian institutions are to be included in future plans which Mr. Wood has under consideration. The first scholarships will apply to the 1948-49 university year of the insititutions. Although Mr. Wood indicated that he wished the scholarships to be awarded to students in medical faculties with highest marks in year-end examinations, actual awarding of the scholarships is largely left to the discretion of the universities governing bodies. The majority of the scholarships were presented to qualifying students at commencements held last month.

Wax Firm Names Reps.

General Wax Refining Co., New York, recently appointed Allied Basic Chemicals Co., Toronto, as its sales representative for Ontario. Allied will handle the sale of all types of natural waxes to the floor, furniture and shoe polish industries in the Province of Ontario. Harry S. Smith and T. J. Brioux head Allied.

A recent photograph of the new headquarters of Velsicol Corp., Chicago, where laboratories and offices are located The Velsicol building, located at 330 E. Grand Ave., is air-conditioned and fireproof. Plant is located at Marshall, Ill.

IMPROVE YOUR PACKAGES

of Free-Flowing Granular Products

Use ALUMINUM POURING SPOUTS...

*SEAL-SPOUTS

SEAL-SPOUTS increase market preference because housewives want packages that are . . .

- Easier to open
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Our new four page folder will give you complete details about SEAL-SPOUTS — why they gain consumer acceptance — how they are quickly and automatically added to packages in the production line.

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Producers of synthetic resins, soaps, cosmetics, rubber, detergents, textiles, paints, varnishes, etc., use Woburn Fatty Acids in their processing. Our continuous research and development in these fields have proven so invaluable to our many customers that we have prepared a number of technical Bulletins covering these various processes. We will be happy to send them to you upon request.

WOBURN CHEMICAL CORPORATION (N. J.)
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WOBURN BULLETINS

Keep It Clean

Specialists in Powdered Hand Cleansers

★ New SOPAC—Beaded soaps—fortified with LANOVEL Cold Cream Base—New vegetable scrubber, MILOPAC

★ STEROPAC—pH 7.0—with both LANOVEL and MILOPAC

★ BOROPAC—Completely soluble—with LANOVEL

★ Private formulations

Write for samples

SKOTCH PRODUCTS CORPORATION
2710-12 Detroit Ave., Cleveland 13, Ohio

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THE MARK OF QUALITY

CROSBY DIPENTENE

A carefully refined terpene hydrocarbon, possessing exceptionally good solvent properties and odor, designed for use in those products and processes which require a high quality DIPENTENE.

TYPICAL ANALYSIS

Specific Gravity 15.5C	0.852
Refractive Index 20C	1.474
Unpolymerized Residue	1.2%
A.S.T.M. Distillation	
Initial B.P.	170C
5%	174C
95%	182C
Kauri Butanol Test	70cc
Aniline Point	—10C

CROSBY CHEMICALS, INC.
DE RIDDER, LOUISIANA

Sanitary Chemicals Featured at Supermarket Show

WAX polishes for household use were an outstanding feature of numerous displays at the Supermarket Institute's 11th annual convention and trade show at the Stevens Hotel, Chicago, recently. Laundry and toilet soaps were also extensively presented along with insecticides and other household chemicals.

Colgate-Palmolive-Peet Co., Jersey City, N. J., made its first public showing of its new heavy duty detergent, "Fab," for laundry and kitchen use, and also stressed its "Vel" beauty bar, a synthetic detergent in bar form, and the new "Ajax" scouring powder. Not neglected in the display were the more familiar "Super Suds," "Vel" laundry powder, "Palmolive" and "Cashmere Bouquet" toilet bars. Staffing the booth were A. A. Lynn, merchandising manager. J. Marshall, New York divisional manager, and two Chicago district managers, M. P. Frawley and Marshall Lachner.

Procter & Gamble Co., Cincinnati, O., exhibited "Tide," "Dreft," "Oxydol" and other laundry soaps, with special attention directed to "Duz" through a "Who is Mr. Duz?" contest, for which hunting equipment, fishing gear and golf accessories were offered as prizes. Mark Upton, sales manager, was on hand from Cincinnati, with E. C. Moffatt, eastern sales manager, and C. W. Mussett of the central sales office.

Lever Bros. Co., Cambridge, Mass., had an extensive display of advertising copy used by outstanding supermarket operators around the country for promotion of "Lifebuoy," "Lux" and "Rinso" soaps and "Spry" shortening. On hand, also were representatives of Lever's advertising agency, for consultation with operators seeking assistance on advertising programs. In charge for Lever Bros. were John Brownell, general sales manager, Walter McKee, vice president, Dick Anthony, general field manager, from Cambridge, and four regional sales managers.

Allen B. Wrisley Co., Chicago, showed a full line of soaps, shampoos, water softeners and other sanitary products.

Simonize Co., Chicago, displayed a new self-polishing paste wax which is offered in different shades to match the wood of the floor on which it is to be used. Also shown were upholstery and rug shampoos, chrome metal cleaners and other company products. H. L. Nehrbass, vice president in charge of advertising, received visitors, assisted by Tom Walsh of the sales staff.

O'Cedar Corp., Chicago, displayed its full line of waxes, polishes, mops and other sanitation supplies, several of which made their first public appearance in newly designed containers and labels on which the company has been working for one and one-half years. B. T. Ducey, sales manager, called attention to the mops with pastel colored fabrics to enchance buying appeal. Since introduction of this idea, there has been a significant upswing in sales, he said. Recent reduction in prices of the company's line of waxes, he stated, resulted from the installation of considerable postwar machinery that has caused a considerable lowering of production costs. R. A. Schultz, Chicago sales director, was in charge.

Sherwin Williams Co., Cleveland, O., featured insecticides, floor waxes, auto polishes and other chemical compounds for household use, also a "Bug Blaster" dust gun, "Weed-No-More" weed killer and other products for the home garden. Shown, too was the familiar 100 percent linseed oil "Flaxsoap."

Boyle-Midway, Inc., New York, designed their booth to tie in with their extensive current national advertising program covering "Old English" wax, and other products. Also shown were insect sprays and "Snarol" for control of snails and slugs. Ralph Hartman, Chicago sales manager, was in charge, assisted by field men from nearby territories.

Paradize Products Corp., Fairview, N. J., showed their "PDB" moth nuggets and refills, with John W. Brompton, sales manager, in charge, assisted by Nelson B. Webster, Chicago sales director.

Other exhibitors of sanitary specialities included American Steel Wool Co., Long Island City, N. Y., Oakite Products, Inc. and Wilbert Products Co., both New York, and Gold Seal Co., Chicago.

Bobrick Contest a Tie

The Bobrick soap dispenser contest to guess the number of times its liquid soap dispenser would operate continuously dispensing soap before any part failed ended recently in a three-way tie, Bobrick Manufacturing Corp., Los Angeles, announced last month. According to the company, the dispenser operated 1,484,947 times and the three winners each guessed that it would continuously dispense soap a million and a half times before failing. The contest began at the National Sanitary Supply Association convention in Chicago in April. Names of the winners are Leo Schneider of Delta Chemical Co., Memphis; M. B. Senzell, Kor-X-All Co., Evansville, Ind., and J. R. Vonachen, Vonachen Industrial Supplies, Peoria, Ill.

New Rat Paste

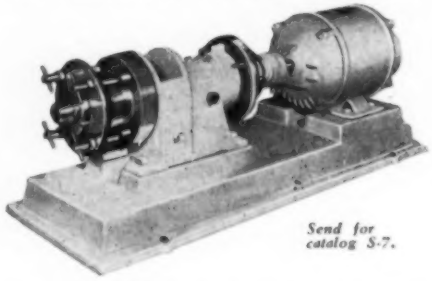
Velodent Products Mfg. Co., New York City, has announced a new rat paste "Kant-Liv," with fortified red squill, packaged in lithographed collapsible tubes, holding 2, 4 and 8 ounces. This is the first time, the manufacturers claim, that a complete rat bait has been available in tubes. A self-selling counter display rack holding one dozen of the two oz. size is available for dealers.

Smythe Berlage V. P.

E. A. Smythe, export manager, was recently named vice-president of J. Berlage Co., New York. Previously, Mr. Smythe had been buyer of chemicals for the Netherlands Purchasing Commission. He has been in the export-import business for the past 25 years.

CHARLOTTE COLLOID MILL

For BETTER EMULSIONS at LOWER COST



Send for catalog S-7.

The CHARLOTTE COLLOID MILL is a high speed disintegrator and emulsifier for immiscible liquids, liquids carrying solids in suspension, and pastes.

Absolute uniformity of product, better plant control, continuous production, and savings in floor space and operating costs are assured.

The CHARLOTTE COLLOID MILL guarantees effective dispersion and thorough blending of such products as:

- Polishes of all kinds
- Soap Products
- Insecticides
- Detergents

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Division of Greenwich Machine and Tool Co.

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Offices in principal cities.

Cresylic Acid

HIGH BOILING TAR ACID

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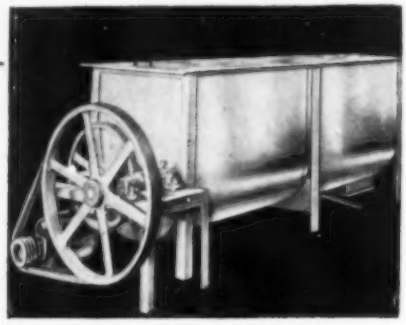
MIRVALE CHEMICAL CO. LIMITED

Mirfield. Yorks. Phone Mirfield 2157



UNIFORM MIX
Low Maintenance Cost

The RODGERS MIXERS are designed to handle dry powders, granular materials, pastes and semi-liquids and a great variety of other materials requiring a thorough mixing.

The entire mixer can be built of stainless steel if required.

Write for full details and prices.

★ **Agitator** — Especially designed agitation prevents material from packing. Easily removed for proper cleaning.

★ **Jackets** — If the material requires heating or cooling the RODGERS MIXERS can be furnished with jackets.

★ **Dust tight** — Shells are constructed of seam welded sheet steel.

Leak proof — sealed packed bearings, making the mixer dust tight and leak proof.

R GEORGE G. RODGERS CO.

225 W. 34th ST. NEW YORK 1, N. Y.

EVERYONE IS TALKING ABOUT IT!

SAVE TIME, LABOR, and WAX-

WAX *large* FLOORS

The easy way with

American WAXERS

Hollow aluminum or plastic handle is wax reservoir in three capacity sizes. Valve regulates even flow through heavy sheepskin pad which snaps off for easy rinsing.

ORDER TODAY - Shipped Prepaid Anywhere

THE AMERICAN SPECIALTY CO., AMHERST, OHIO

Enclosed find $____ for capacity sizes checked:

☐ PINT SIZE $4.50 ☐ QUART SIZE $9.50 ☐ GALLON SIZE $16.50

NAME____

ADDRESS____

CITY____ ZONE____ STATE____

NOTE: A FEW TERRITORIES AVAILABLE FOR REPRESENTATIVES WRITE TO DEPT. S

New Exterminating Service

Aerosol Engineers, newly organized Chicago pest control concern, used large newspaper advertising space last month to announce a new exterminating service using the aerosol fogging method. Partners in the enterprise, believed to be the first commercial service of its kind in Chicago, are Robert E. Berns and Myron G. Nussbaum. Mr. Berns was formerly with Sanitary Exterminating Co. and the Aerosol Fog Corp., both of Jersey City, N. J. He is a graduate of the University of Illinois and during the war served with an army malarial control unit in the Pacific theatre. Mr. Nussbaum is a University of Wisconsin graduate and later studied at the Univ. of Chicago, where he specialized in zoology.

Equipment of the new company includes a Todd Shipbuilding Corp. fog applicator, first developed for the navy use in generating fog screens. Aerosol Engineers, Mr. Nussbaum said, are prepared to serve an area in a radius of 75 miles from Chicago. The Company also handles pest control business from industrial plants, public institutions of all types, farms, suburban estates, city homes and apartments. Headquarters are at 907 Argyle St., Chicago.

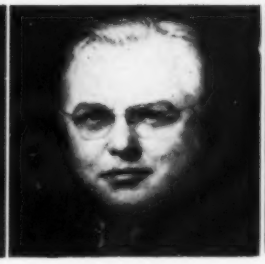
Hudson Opens Campaign

H. D. Hudson Mfg. Co., Chicago, is conducting a newspaper advertising campaign on use of sprayers and dusters by the summer garden operator. The first of the series which appeared in June was addressed to dealers and suggested that they tie in with the company's "Garden Promotion" plan.

Axton-Cross Moves

Axton-Cross Co. recently purchased and is now located at its new plant on Canal St., Shelton, Conn. The company was formerly located in Cheshire, Conn. Offices, warehouse and mixing plants are located at the Shelton address, where the company has a new plant providing 20,000 square feet of floor space and railroad sidings. The Axton-Cross telephone number is Derby 5700.

FISCHER



DOWNEY

MCGLYNN

MM&R Elects Officers

A number of changes in the executive makeup of Magnus, Mabee & Reynard, Inc., New York, were decided upon at a recent meeing of the firm's board of directors. Elevated to the rank of vice-president was George H. McGlynn, treasurer since 1933, who now holds the title of vice-president and treasurer. William F. Fischer, sales manager and veteran of 40 years with the company was named assistant vice-president in charge of sales and Arthur H. Downey, technical director, was appointed assistant vice-president in charge of technical development. The following four divisional sales heads were elected assistant vice-presidents: M. Stanley Barker, divisional sales manager of the New York area, who has been with the firm for 28 years; John W. Felton, Jr., manager of the southern division; G. F. Mehren, in charge of the company's midwestern area with headquarters in Chicago, and Shockley Gamage, export sales manager.

Reelected were the following: Percy C. Magnus, president; Joseph B. Magnus and Robert B. Magnus, vice-presidents; and John H. Lothian, comptroller.

Mfg. Chemists Elect

At the annual meeting of the Manufacturing Chemists' Association, held June 3, at Skytop, Pa., Charles S. Munson, chairman of the executive committees of U. S. Industrial Chemicals, Inc., and Air Reduction Co., both New York, was reelected president of the Association. Other officials reelected at the meeting were George W. Merck of Merck & Co., Rahway, N. J., chairman of the executive committee; Leonard T. Beal of Pennsylvania Salt Co., Philadelphia and Harold O. C. Ingraham of General Chemical Div., Allied Chemical & Dye Corp., New York, vice-presidents; James W. McLaughlin, Bakelite Corp., New York, and Warren N. Watson, treasurer and secretary respectively.

H. Taylor, D&O, Dies at 31

Horace N. Taylor, 31, since Feb. 1, 1948, assistant to V. H. Fischer, vice-president in charge of merchandising of Dodge & Olcott, Inc., New York, died suddenly June 5. Following his graduation from Yale University in 1939, Mr. Taylor joined Dodge & Olcott. The next year he was appointed to the sales staff and assigned to the Chicago branch. Two years later, he was inducted into the armed forces, with which he served until May, 1944. He rejoined the firm and covered upper New York State and Canada. Mr. Taylor is survived by his parents, his wife and three young daughters.

Honor Givaudan Advt.

An advertisement of Givaudan-Delawanna, Inc., New York, was selected as one of the most outstanding of 1947 by the Art Directors' Club and was exhibited with other selections at the Grand Central Galleries, New York, during June. The advertisement, one of the first in a "Fragrances and the Seasons" series, originally appeared in the April, 1947, issue of *Soap and Sanitary Chemicals*. Reprints of the illustration, suitable for framing, are available.

Maywood Vacation Closing

Production facilities of Maywood Chemical Works, Maywood, N. J.,were shut down July 3-12 for the annual vacation period.

Tamms SILICA
Soft Amorphous Type

Grades to meet various abrasive requirements . . . for all kinds of metal polishes.

Tamms TRIPOLI
Rose and Cream Colors

Once-ground, double-ground and air-float — ideal grades for buffing and polishing. Also rubbing compounds.

Tamms products are widely used in the polish trade, preferred for quality results. Write today for prices and samples.

Tamms MULTI-CEL
Diatomaceous Earth

Top grade, ground extremely fine. A milder abrasive than silica. Best for silver polish.

Tamms BENTONITE
(Suspension Medium)

Very finely-ground colloidal clay. Wholly soluble — absorbs 5 times its weight in water.

Dept. RM-3, **TAMMS SILICA CO.,** 228 N. La Salle Street, Chicago 1

OXIWAX

Oxidized Petroleum Wax

Emulsions — Floor Polishes
Carbon Paper — Protective Coatings
M. P. 90-190°F Acid Value 5-55

AMORWAX

Refined Petroleum Wax

Paste Polish — Shoe Polish
Laminating — Impregnating
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M.P. 100-195°F Pen. 2-25 Color Amber-White
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Write for
formulations, specifications, quotations, tech. data

PENNOTEX OIL CORPORATION
29 Broadway New York 6, N. Y.

CERTIFIED COLORS

A broad range of shades for Shampoos, Soaps, Drugs, Medicines, Creams, Rinses, and Cosmetics.

PYLA-SYNTH COLORS

Fast colors for the New Synthetic Detergents in Red, Blue, Green, Amber and Yellow.

- *We offer a full line of fast colors for all soap and soap products.*
- Send for free samples.
  Send for price lists.

PYLAM PRODUCTS CO., INC.

Manufacturing Chemists, Importers, Exporters

799 Greenwich St. New York City 14

Cable Address: "Pylamco"

ADVERTISING CLOSING DATE

for SOAP AND SANITARY CHEMICALS is the 10th of preceding month

YOUR COOPERATION IN FURNISHING COPY INSTRUCTIONS ON TIME WILL HELP US MEET OUR PUBLICATION DATE.

INSECTICIDE LAW

(*From Page* 139)

The precautions, if any, which must be taken;

A statement of quantity;

and the name and address of the manufacturer or vendor.

Finally, if you want to increase the sale of your products make your labels educational and instructional as well as informative.

CONVENTION REPORT

(*From Page* 131)

numbered. Within the next 10 years, it will be completely replaced by synthetic chemical toxicants. Will you give your views on the truth or falsity of this statement along with any pertinent comments you may wish to make?"

RUSSELL B. Stoddard of U. S. Industrial Chemicals, Inc., New York, replied that some doubt had been cast on the future of pyrethrum because of conditions in the past six years. During the war, consumption of pyrethrum in civilian insecticides was far below normal. In addition, the introduction of DDT also hurt. Pyrethrum is not a cheap product, Mr. Stoddard pointed out, stating that pyrethrins are unique in that they give fast kill, have a wide application of use, are not toxic to warm blooded animals and lack many undesirable characteristics of other toxicants. Pyrethrum is still essential to insecticides, although there are fewer wholly pyrethrum insecticides now than in the past. There are no synthetic replacements for pyrethrum as yet, Mr. Stoddard stated. He added that a serious shortage in the next few years was foreseen unless the present trend of large stocks and low production is reversed. Pyrethrum must not be a speculative football, he concluded.

Doubt was expressed that pyrethrum will be replaced by synthetics within the next 10 years by Anthony Grady of Sinclair Refining Co., East Chicago, Ind. He indicated that there may not be as much pyrethrum used in houshold insecticides in the future as in the past, but that pyrethrum will continue to be used in some quantity for a long time to come.

The next point raised for discussion was: "Spraying of homes and other premises by public authorities, that is, by state and federal government officials, as a means to protect the public health has injured the sale of household insecticide products by manufacturers and dealers located in areas near those so treated. This practice should be stopped. Will you comment on this statement, particularly as regard to its accuracy based on your experience?"

One effect has been to discourage insecticide sales, according to John Powell, who reported that a great deal of discouragement was experienced by dealers in localities where the practice was tried. Another view was expressed by J. A. Green of Standard Oil Co., of Indiana. Chicago, who stated that public spraying is a good thing. He felt the industry is too pessimistic. "We didn't fight DDT and 'aerosols,'—we sold them," Mr. Green declared. The public is more insect conscious now than ever, and research must be continued to produce better insecticides. Sprayer manufacturers must also make better sprayers, he added.

The next question dealing with aerosols read: "Inasmuch as aerosols may vary in their rate of delivery of the insecticide due to variations in the valve or temperature, should not those who market them avoid instructions for use based on so-many seconds? Would it not be better if the user were simply told to fill the room or area with the mist and no definite time mentioned?"

The following statement was read by John Mills of Bridgeport Brass Co.

"THESE are two of many questions on aerosol dispersion that must be answered to set minimum standards so that the consumer is not mislead by inferior products. We are a new industry and unless we take extreme precaution to fulfill basic requirements, there would be serious adverse effects.

The time element of aerosol dispersion was adopted by the armed forces at the suggestion of the U. S. Department of Agriculture as a means of informing our servicemen how to use the aerosol insecticide economically for malaria control. Specific instructions on the aerosol units supplied the armed forces stated four to six seconds per thousand cubic feet for flies and mosquitoes. Specifications covering the manufacture of aerosol insecticide containers, among many other regulations, included limits in variation of rate of spray at 70 degrees Fahrenheit.

It is true that the pressure of liquefied gases increases as the temperature rises. This increase in pressure would tend to increase the flow of ingredients but laboratory tests show that the variation of weight dispensed is only around nine grams per minute, between a low of 65 degrees Fahrenheit and a high 85 degreess Fahrenheit. This variation is small compared to the variation of weight dispensed due to the poor construction of several types of valves that have been on the market in the past two and one-half years.

There are some types of valve designs that discharge a minimum of 20 grams per minute up to a maximum of 150 grams per minute, or in time to empty a 16-ounce unit, from an approximate maximum of 20-22 minutes to as little as about three minutes. You can readily appreciate, with this condition existing, time is a poor yardstick.

The valve is one of the most important parts of an aerosol package. A given design valve will have definite spray-rates for given formulae. This is especially true when the ratio of non-volatile to volatile material or propellants vary. Valves, therefore, should be designed for specific formulae to give the most uniform spray-rate and the best particle size for the most effective kill of the common household insects.

The principle of aerosol dispersion is to place a concentrated insecticide in the air. Insects coming in contact with the suspended particles of toxic materials are knocked down and killed. The combination of concentrated insecticides, liquefied gases, valve and container, is a package more expensive than the oil-base spray and, therefore, has to be more efficient and economical. These results can only be obtained when directions are so written that the device is used properly and the insecticide not wasted.

Webster defines mist as "visible water vapor suspended in atmosphere—aqueous vapor falling in numerous but separate, almost imperceptible drops." Both of these definitions would apply if we substituted the non-volatile aerosol insecticide in place of the words "water" or "aqueous." A mist, therefore ,is a very broad term.

The various aerosol products that are on the market today, so differ in formulae, that one showing little or no mist would be effective against the average household flying insects, while another with minimum toxic ingredients but high in non-volatile oils would develop a mist in the room with questionable effectiveness.

A warning on most aerosol units states "avoid excess inhalation of mist." If instructions were issued to fill a room or area with mist and in the next

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